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MONTHLY PROGRESS REPORT No. 7
for the period September 1-30, 1976
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

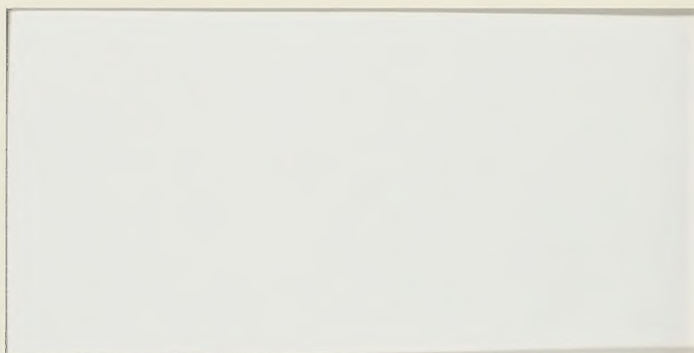
*Colorado C-b Tract***aeromet inc.**

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MONTHLY PROGRESS REPORT No. 7

for the period September 1-30, 1976

to

ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

1860 Lincoln St., Suite 900

Denver, CO 80203

Contract No. 68-01-1946

by

Aeromet, Inc.

Box FF

Norman, OK 73070

Colorado Cb Tract

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Denver, CO 80202

Contract No. 80-61-1548

Denver, Inc.
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Denver, CO 80202

Contract to Order

1.0 INTRODUCTION

Low level temperature and wind data were collected for September, 1976 at Casper, Wyoming; the Shell Oil Co. Colorado Cb Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville, Utah; and Rock Springs, Wyoming. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made $\frac{1}{2}$ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built in Rustrak strip chart recorder and the temperature was recorded within the range from -50 to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into six parts, one corresponding to each of the six field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Colorado Cb Tract Field Summary

Mr. Chuck Bergonzini agreed to conduct the balloon observations after 13 September. The only stipulation was that the month of October he could not promise very good data recovery because of his work on the Tract.

A routine inspection of the Colorado Cb Tract field site was conducted during the month of September. A new method of tuning the receiver to the temperature sonde frequency was tested satisfactorily. Henceforth, there should be fewer number of intervals with interpolated temperature data.

The observers attempted 73% of the scheduled pilot balloon launches resulting in 73% recovery of the temperature data and 50% recovery of the wind data. A 23% loss in wind data was due to poor weather conditions.

2.1 DATA RECOVERY

2.1.1 Chicago to First Field Recovery

Mr. Chuck Bergman, agent in charge of the field office, advised that the only information was that the month of October he could not provide very good data recovery because of his work in the field.

A meeting was held by the Chicago to First Field office was conducted during the month of September. A copy of the report was sent to the receiver to the temporary office. The report was found satisfactory. However, there should be some action of recovery with integrated temperature data.

The receiver attempted 75% of the scheduled work with the launchers resulting in 10% recovery of the temperature data and 50% recovery of the wind data. A 10% loss in wind data was due to poor weather conditions.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release $\frac{1}{2}$ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analysis 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

The average mixing layer height was computed for the morning and afternoon based on the wind up and 1000 temperature soundings. The latter required a four-hour average to be enough to the wind-ward temperature to average the temperature of the sounding mixing layer height. The afternoon mixing layer height was computed as the time of maximum heating and the end of the day's layer height data must be given that were changed to the "calculated" value as expected. Without requiring the field data with atmospheric-thermodynamic the extension of the sounding data can now be justified in establishing a data base for "calculated" values. The approximation of the afternoon mixing layer height is a "calculated guess" for those areas (1) local effects which are to be determined and would be followed out with atmospheric-thermodynamic effects which are the layer 1000 (e.g. 1000 mb) effects, and (2) meteorological effects which are within the expected range in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The layer-ward method would be to define the "heat island" effects ranging from 0 to 10°C and let the user decide which would best serve the needs. However, for those areas (1) "heat island" and (2) "heat island" effects are calculated and listed for the morning and afternoon soundings in the Table Average Mixing Layer Height.

The symbol WLD means that no mixing layer height was defined and etc. is the abbreviation for surface.

Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification scheme. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonl components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT ($^{\circ}C/100m$)	WIND SPEED
A	<-1.9	≤ 2
B	$-1.9 - -1.7$	≤ 5
C	$-1.7 - -1.5$	≤ 6
D	$-1.5 - -0.5$	ALL SPEEDS
E	$-0.5 - 1.5$	≤ 5
F	>1.5	≤ 3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

if the $\Delta T/100\text{m}$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of $1.7^\circ\text{C}/100\text{ m}$ and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL (4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

MONTH: MARCH	YEAR: 1976.	CASPER	SFC TO 500 METERS
0 0 00	00 0	10 0	0 0
100 0 0	0	0 0	0 0 00

00-5081

and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. Number
Casper, Wyoming	1
Colorado CB Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6

The month and season number codes are as follows.

MONTH	1-12
SEASON	13=DJF
	14=MAM
	15=JJA
	16=SON
ANNUAL	17

PILOT BALLOON SUMMARY
 Colorado CB Tract
 September, 1976

September 1	0630	
	1200	
September 3	0630	
	1300	
September 5	MORN }	No observations received.
	AFTN }	
September 7	0700	Balloon lost in clouds after 10 1/2 minutes.
	1200	Balloon lost in clouds and rain after 9 1/2 minutes. The temperature data were interpolated over the interval from 1 3/4 to 5 3/4 minutes.
September 9	0700	
	1200	
September 11	MORN }	No observations received.
	AFTN }	
September 13	MORN }	No observations received.
	AFTN }	
September 15	0610	Balloon lost in clouds after 6 minutes.
	1300	Temperature readings lost after 2 1/2 minutes due to excessive noise.

PILOT BALLOON SUMMARY
Colorado CB Tract
September, 1976

September 17	0830	Temperature values interpolated over the interval from 1 3/4 to 9 1/4 minutes.
	1445	Temperature values interpolated over the interval from 4 3/4 to 10 minutes.
September 19	MORN } AFTN }	No observations received.
September 21	0645 1230	Balloon could not be tracked due to fog.
September 23	0600 1300	Balloon could not be tracked due to rain. No wind observations due to rain.
September 25	0615 1237	No wind observations due to low clouds. No wind observations due to rain and clouds.
September 27	0700 1300	No wind observations due to fog and misty rain. Temperature values were interpolated over the interval from 3 1/2 to 5 3/4 minutes.
September 29	0600 1300	No wind observations.

AVERAGE MIXING LAYER HEIGHT

COLORADO CB TRACT

September, 1976

DATE	HEIGHT IN METERS					
	0 ⁰	MORNING +5 ⁰	+10 ⁰	0 ⁰	AFTERNOON +5 ⁰	+10 ⁰
1	sfc	800m	2100m	50m	1500m	2400m
3	50m	1000m	2900m	sfc	1800m	3750m
5						
7	50m	900m	2300m	sfc	2500m	3250m
9	sfc	600m	1600m	sfc	1400m	1750m
11						
13						
15	sfc	1300m	N/D			
17	150m	N/D	N/D	sfc	1900m	2700m
19						
21	sfc	300m	N/D	sfc	1500m	2400m
23	200m	1150m	1500m	sfc	1000m	1600m
25	sfc	500m	1750m	sfc	500m	N/D
27	sfc	900m	1900m	sfc	1250m	1900m
29	sfc	1100m	2100m	150m	2200m	N/D

CLOUD COVER AND SIGNIFICANT WEATHER

COLORADO Cb TRACT

September, 1976

<u>DATE</u>	<u>MORNING</u>	<u>AFTERNOON</u>
1	clear	clear
3	clear	clear
5		
7	overcast, rain	overcast, rain
9	clear	clear
11		
13		
15	scattered	scattered
17	scattered	scattered
19		
21	fog	clear
23	rain	rain
25	overcast	rain
27	fog, rain	clear
29	clear	clear



COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 2009

DATE 09/01/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.24	-0.24

***** COL CB TRACT *****
***** ELEV 2042 METERS *****
***** SOUNDING ID 2011 *****

DATE 09/01/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
634.	672.	0.0	-0.73

***** COL CB TRACT *****
***** ELEV 2042 METERS *****
***** SOUNDING ID 1941 *****

DATE 09/C3/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
459.	574.	0.03	-0.78

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 1227

DATE 09/03/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1000 Å OF THE SFC

LAYER BASE	LAYER TOP		DT/DZ
METERS AGL	METERS AGL	(DEG C)/100M	

0	100	-0.63
100	250	-0.87
250	500	-0.63
500	750	-0.59
750	1000	-0.71
1000	1500	-0.74

COL CB TRACT ELEV 2042 METERS SOUNDING ID. 992

DATE 09/07/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

267. 0.0 -0.48

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 0
DATE 09/07/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL INV TOP METERS AGL INV DT/DZ (DEG C)/100M DT/DZ BELOW INV (DEG C)/100M
0. 38. 0.0 0.0

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 2279
DATE 09/09/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL INV TOP METERS AGL INV DT/DZ (DEG C)/100M DT/DZ BELOW INV (DEG C)/100M
0. 267. 0.28 0.0

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 2368
DATE 09/09/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL INV TOP METERS AGL INV DT/DZ (DEG C)/100M DT/DZ BELOW INV (DEG C)/100M
0. 38. 4.72 0.0

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 2331
DATE 09/15/76 TIME 06:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL INV TOP METERS AGL INV DT/DZ (DEG C)/100M DT/DZ BELOW INV (DEG C)/100M
38. 76. 0.0 -0.24

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 2523
DATE 09/15/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE INSUFFICIENT DATA WITHIN 2000M OF THE SFC

COL CB TRACT
ELEV 2042 METERS
SOUNDING ID 2567
DATE 09/17/76 TIME 08:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.



0.
100.
250.
500.
750.
1000.
1500.

-1.20
-0.51
-0.93
-0.94
-0.98
-0.94

***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 2406 *****

DATE 09/17/76 TIME 14:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	305.	INV TOP METERS AGL	457.	INV DT/DZ (DEG C)/100M	0.0	DT/DZ BELOW INV (DEG C)/100M	-0.68
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***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 0 *****

DATE 09/21/76 TIME 06:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	0.	INV TOP METERS AGL	419.	INV DT/DZ (DEG C)/100M	0.39	DT/DZ BELOW INV (DEG C)/100M	0.0
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***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 0 *****

DATE 09/21/76 TIME 12:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	191.	INV TOP METERS AGL	229.	INV DT/DZ (DEG C)/100M	0.0	DT/DZ BELOW INV (DEG C)/100M	-0.61
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***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 2123 *****

DATE 09/23/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	0.	INV TOP METERS AGL	38.	INV DT/DZ (DEG C)/100M	0.0	DT/DZ BELOW INV (DEG C)/100M	0.0
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***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 2061 *****

DATE 09/23/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL		INV TOP METERS AGL		INV DT/DZ (DEG C)/100M		DT/DZ BELOW INV (DEG C)/100M	
---------------------	--	--------------------	--	------------------------	--	------------------------------	--

991. 1029. 0.0 -0.52

***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 2058 *****

DATE 09/27/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV
METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M

76. 152. 0.0 -0.38

***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 1965 *****

DATE 09/27/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV
METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M

76. 114. 0.0 -0.37

***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 1958 *****

DATE 09/29/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV
METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M

0. 38. 0.0 0.0

***** COL CB TRACT ***** ELEV 2042 METERS ***** SOUNDING ID 1947 *****

DATE 09/29/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV
METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M

787. 825. 0.0 -1.00

MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT ELEV 2042 METERS

HOLZWORTH'S CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	INVERSION BASE HEIGHT (M)												TOTAL
	1- 100	101- 250	251- 500	501- 750	751- 1000	1000- 1500	1501- 2000	2001- 2500	2501- 3000	3001- 3500	3501- 4000	4001- 4500	
1 - 100	4	2	0	1	2	0	0	0	0	0	0	0	13
101 - 250	0	0	2	0	0	0	0	0	0	0	0	0	2
251 - 500	0	0	0	0	0	0	0	0	0	0	0	0	2
501 - 750	0	0	0	0	0	0	0	0	0	0	0	0	2
751 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0
1001 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
1501 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0
2001 - 2500	0	0	0	0	0	0	0	0	0	0	0	0	0
2501 - 3000	0	0	0	0	0	0	0	0	0	0	0	0	0
3001 - 3500	0	0	0	0	0	0	0	0	0	0	0	0	0
3501 - 4000	0	0	0	0	0	0	0	0	0	0	0	0	0
4001 - 4500	0	0	0	0	0	0	0	0	0	0	0	0	0
4501 - 5000	0	0	0	0	0	0	0	0	0	0	0	0	0
5001 - 5500	0	0	0	0	0	0	0	0	0	0	0	0	0
5501 - 6000	0	0	0	0	0	0	0	0	0	0	0	0	0
6001 - 6500	0	0	0	0	0	0	0	0	0	0	0	0	0
6501 - 7000	0	0	0	0	0	0	0	0	0	0	0	0	0
7001 - 7500	0	0	0	0	0	0	0	0	0	0	0	0	0
7501 - 8000	0	0	0	0	0	0	0	0	0	0	0	0	0
8001 - 8500	0	0	0	0	0	0	0	0	0	0	0	0	0
8501 - 9000	0	0	0	0	0	0	0	0	0	0	0	0	0
9001 - 9500	0	0	0	0	0	0	0	0	0	0	0	0	0
9501 - 10000	0	0	0	0	0	0	0	0	0	0	0	0	0
10001 - 10500	0	0	0	0	0	0	0	0	0	0	0	0	0
10501 - 11000	0	0	0	0	0	0	0	0	0	0	0	0	0
11001 - 11500	0	0	0	0	0	0	0	0	0	0	0	0	0
11501 - 12000	0	0	0	0	0	0	0	0	0	0	0	0	0
12001 - 12500	0	0	0	0	0	0	0	0	0	0	0	0	0
12501 - 13000	0	0	0	0	0	0	0	0	0	0	0	0	0
13001 - 13500	0	0	0	0	0	0	0	0	0	0	0	0	0
13501 - 14000	0	0	0	0	0	0	0	0	0	0	0	0	0
14001 - 14500	0	0	0	0	0	0	0	0	0	0	0	0	0
14501 - 15000	0	0	0	0	0	0	0	0	0	0	0	0	0
15001 - 15500	0	0	0	0	0	0	0	0	0	0	0	0	0
15501 - 16000	0	0	0	0	0	0	0	0	0	0	0	0	0
16001 - 16500	0	0	0	0	0	0	0	0	0	0	0	0	0
16501 - 17000	0	0	0	0	0	0	0	0	0	0	0	0	0
17001 - 17500	0	0	0	0	0	0	0	0	0	0	0	0	0
17501 - 18000	0	0	0	0	0	0	0	0	0	0	0	0	0
18001 - 18500	0	0	0	0	0	0	0	0	0	0	0	0	0
18501 - 19000	0	0	0	0	0	0	0	0	0	0	0	0	0
19001 - 19500	0	0	0	0	0	0	0	0	0	0	0	0	0
19501 - 20000	0	0	0	0	0	0	0	0	0	0	0	0	0
20001 - 20500	0	0	0	0	0	0	0	0	0	0	0	0	0
20501 - 21000	0	0	0	0	0	0	0	0	0	0	0	0	0
21001 - 21500	0	0	0	0	0	0	0	0	0	0	0	0	0
21501 - 22000	0	0	0	0	0	0	0	0	0	0	0	0	0
22001 - 22500	0	0	0	0	0	0	0	0	0	0	0	0	0
22501 - 23000	0	0	0	0	0	0	0	0	0	0	0	0	0
23001 - 23500	0	0	0	0	0	0	0	0	0	0	0	0	0
23501 - 24000	0	0	0	0	0	0	0	0	0	0	0	0	0
24001 - 24500	0	0	0	0	0	0	0	0	0	0	0	0	0
24501 - 25000	0	0	0	0	0	0	0	0	0	0	0	0	0
25001 - 25500	0	0	0	0	0	0	0	0	0	0	0	0	0
25501 - 26000	0	0	0	0	0	0	0	0	0	0	0	0	0
26001 - 26500	0	0	0	0	0	0	0	0	0	0	0	0	0
26501 - 27000	0	0	0	0	0	0	0	0	0	0	0	0	0
27001 - 27500	0	0	0	0	0	0	0	0	0	0	0	0	0
27501 - 28000	0	0	0	0	0	0	0	0	0	0	0	0	0
28001 - 28500	0	0	0	0	0	0	0	0	0	0	0	0	0
28501 - 29000	0	0	0	0	0	0	0	0	0	0	0	0	0
29001 - 29500	0	0	0	0	0	0	0	0	0	0	0	0	0
29501 - 30000	0	0	0	0	0	0	0	0	0	0	0	0	0
30001 - 30500	0	0	0	0	0	0	0	0	0	0	0	0	0
30501 - 31000	0	0	0	0	0	0	0	0	0	0	0	0	0
31001 - 31500	0	0	0	0	0	0	0	0	0	0	0	0	0
31501 - 32000	0	0	0	0	0	0	0	0	0	0	0	0	0
32001 - 32500	0	0	0	0	0	0	0	0	0	0	0	0	0
32501 - 33000	0	0	0	0	0	0	0	0	0	0	0	0	0
33001 - 33500	0	0	0	0	0	0	0	0	0	0	0	0	0
33501 - 34000	0	0	0	0	0	0	0	0	0	0	0	0	0
34001 - 34500	0	0	0	0	0	0	0	0	0	0	0	0	0
34501 - 35000	0	0	0	0	0	0	0	0	0	0	0	0	0
35001 - 35500	0	0	0	0	0	0	0	0	0	0	0	0	0
35501 - 36000	0	0	0	0	0	0	0	0	0	0	0	0	0
36001 - 36500	0	0	0	0	0	0	0	0	0	0	0	0	0
36501 - 37000	0	0	0	0	0	0	0	0	0	0	0	0	0
37001 - 37500	0	0	0	0	0	0	0	0	0	0	0	0	0
37501 - 38000	0	0	0	0	0	0	0	0	0	0	0	0	0
38001 - 38500	0	0	0	0	0	0	0	0	0	0	0	0	0
38501 - 39000	0	0	0	0	0	0	0	0	0	0	0	0	0
39001 - 39500	0	0	0	0	0	0	0	0	0	0	0	0	0
39501 - 40000	0	0	0	0	0	0	0	0	0	0	0	0	0
40001 - 40500	0	0	0	0	0	0	0	0	0	0	0	0	0
40501 - 41000	0	0	0	0	0	0	0	0	0	0	0	0	0
41001 - 41500	0	0	0	0	0	0	0	0	0	0	0	0	0
41501 - 42000	0	0	0	0	0	0	0	0	0	0	0	0	0
42001 - 42500	0	0	0	0	0	0	0	0	0	0	0	0	0
42501 - 43000	0	0	0	0	0	0	0	0	0	0	0	0	0
43001 - 43500	0	0	0	0	0	0	0	0	0	0	0	0	0
43501 - 44000	0	0	0	0	0	0	0	0	0	0	0	0	0
44001 - 44500	0	0	0	0	0	0	0	0	0	0	0	0	0
44501 - 45000	0	0	0	0	0	0	0	0	0	0	0	0	0
45001 - 45500	0	0	0	0	0	0	0	0	0	0	0	0	0
45501 - 46000	0	0	0	0	0	0	0	0	0	0	0	0	0
46001 - 46500	0	0	0	0	0	0	0	0	0	0	0	0	0
46501 - 47000	0	0	0	0	0	0	0	0	0	0	0	0	0
47001 - 47500	0	0	0	0	0	0	0	0	0	0	0	0	0
47501 - 48000	0	0	0	0	0	0	0	0	0	0	0	0	0
48001 - 48500	0	0	0	0	0	0	0	0	0	0	0	0	0
48501 - 49000	0	0	0	0	0	0	0	0	0	0	0	0	0
49001 - 49500	0	0	0	0	0	0	0	0	0	0	0	0	0
49501 - 50000	0	0	0	0	0	0	0	0	0	0	0	0	0
50001 - 50500	0	0	0	0	0	0	0	0	0	0	0	0	0
50501 - 51000	0	0	0	0	0	0	0	0	0	0	0	0	0
51001 - 51500	0	0	0	0	0	0	0	0	0	0	0	0	0
51501 - 52000	0	0	0	0	0	0	0	0	0	0	0	0	0
52001 - 52500	0	0	0	0	0	0	0	0	0	0	0	0	0
52501 - 53000	0	0	0	0	0	0	0	0	0	0	0	0	0
53001 - 53500	0	0	0	0	0	0	0	0	0	0	0	0	0
53501 - 54000	0	0	0	0	0	0	0	0	0	0	0	0	0
54001 - 54500	0	0	0	0	0	0	0	0	0	0	0	0	0
54501 - 55000	0	0	0	0	0	0	0	0	0	0	0	0	0
55001 - 55500	0	0	0	0	0	0	0	0	0	0	0	0	0
55501 - 56000	0	0	0	0	0	0	0	0	0	0	0	0	0
56001 - 56500	0	0	0	0	0	0	0	0	0	0	0	0	0
56501 - 57000	0	0	0	0	0	0	0	0	0	0	0	0	0
57001 - 57500	0	0	0	0	0	0	0	0	0	0	0	0	0
57501 - 58000	0	0	0	0	0	0	0	0	0	0	0	0	0
58001 - 58500	0	0	0	0	0	0	0	0	0	0	0	0	0
58501 - 59000	0	0	0										



MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	1.00	0.0	0.0	0.0	0.0	4.4	1.00
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.07

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.10	0.0	0.0	0.0	7.1	0.10
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.10	0.0	0.0	0.0	9.3	0.10
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.20	0.0	0.0	0.0	0.0	0.0	0.0	0.20
SW	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.10
NW	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
NNW	0.20	0.10	0.0	0.10	0.10	0.0	0.0	0.50
AVG SPEED	1.9	3.2	8.2	13.8	17.4	0.0	7.8	0.0
TOTAL	0.50	0.10	0.20	0.10	0.10	0.0	0.0	1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.67

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA



MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	SPEED (METER/SEC) 11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.25	0.0	0.0	0.0	0.0	0.0	0.6	0.25
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.25	0.0	0.0	0.0	0.0	0.0	1.3	0.25
E	0.25	0.0	0.0	0.0	0.0	0.0	2.1	0.25
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.25	0.0	0.0	0.0	0.0	0.0	1.6	0.25
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.4	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	1.00	0.0	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.27

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: SEPTEMBER YEAR: 1976. COL CB TRACT SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.07	0.0	0.0	0.0	0.0	0.0	0.6	0.07
NE	0.0	0.0	0.07	0.0	0.0	0.0	7.1	0.07
ENE	0.07	0.0	0.0	0.0	0.0	0.0	1.3	0.07
E	0.07	0.0	0.0	0.0	0.0	0.0	2.1	0.07
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.07	0.07	0.07	0.0	0.0	0.0	5.1	0.20
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.13	0.0	0.0	0.0	0.0	0.0	1.5	0.13
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.07	0.0	0.0	0.0	0.0	0.0	2.0	0.07
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.13	0.07	0.0	0.07	0.07	0.0	7.8	0.33
AVG SPEED	1.7	3.8	8.2	13.8	17.4	0.0		0.0
TOTAL	0.60	0.13	0.13	0.07	0.07	0.0		1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 5 SOUNDINGS FROM A SAMPLE OF 20 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2009
DATE 09/01/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1.0	SFC	2192	13.01	-0.18	0.0	2.21	1.0	45.
2.0	150	2342	12.83	-0.00	-0.72	2.39	1.4	153.
3.0	300	2500.	12.82	-0.00	-0.54	2.1	1.1	67.
4.0	458.	2542.	11.45	-0.91	-1.81	1.12	2.8	59.
5.0	500.	2542.	11.48	-0.43	-1.28	1.1	2.4	63.
6.0	958.	3000.	11.23	-2.25	-1.56	1.65	3.0	60.
12.0	1958.	4000.	2.55	-6.68	-0.56	2.37		
19.4	2958.	5000.	-0.13	-2.68	-1.70	1.22		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2009
DATE 09/01/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2042.	7	-	1.0	45.
0.5	76.	2118.	0.9	-	1.7	33.
1.0	152.	2194.	0.6	-	1.1	157.
1.5	305.	2271.	0.3	-	1.2	159.
2.0	457.	2347.	2.8	-	3.2	164.
2.5	533.	2423.	2.4	-	3.2	135.
3.0	610.	2499.	2.0	-	2.2	96.
3.5	686.	2575.	1.9	-	2.2	36.
4.0	762.	2652.	1.8	-	2.5	55.
4.5	838.	2728.	1.5	-	1.8	54.
5.0	914.	2804.	1.7	-	2.0	52.
5.5	991.	2880.	2.3	-	3.0	54.
6.0	1067.	2956.	2.8	-	3.8	52.
6.5	1143.	3033.	3.4	-	4.9	81.
7.0	1219.	3109.	5.0	0.0	5.0	88.
7.5	1295.	3185.	5.5	0.0	5.3	81.
8.0	1372.	3261.	5.2	0.0	5.4	70.
8.5	1448.	3337.	4.3	0.0	5.3	65.
9.0	1524.	3414.	3.3	0.0	5.3	58.
10.0	1600.	3490.	3.3	0.0	5.3	58.
11.0	1676.	3566.	3.3	0.0	5.3	58.
12.0	1752.	3642.	3.3	0.0	5.3	58.
	1828.	3718.	3.3	0.0	5.3	58.
		3794.	3.3	0.0	5.3	58.
		3870.	3.3	0.0	5.3	58.
		3946.	3.3	0.0	5.3	58.
		4022.	3.3	0.0	5.3	58.
		4098.	3.3	0.0	5.3	58.
		4174.	3.3	0.0	5.3	58.
		4250.	3.3	0.0	5.3	58.
		4326.	3.3	0.0	5.3	58.
		4402.	3.3	0.0	5.3	58.
		4478.	3.3	0.0	5.3	58.
		4554.	3.3	0.0	5.3	58.
		4630.	3.3	0.0	5.3	58.
		4706.	3.3	0.0	5.3	58.
		4782.	3.3	0.0	5.3	58.
		4858.	3.3	0.0	5.3	58.
		4934.	3.3	0.0	5.3	58.
		5010.	3.3	0.0	5.3	58.
		5086.	3.3	0.0	5.3	58.
		5162.	3.3	0.0	5.3	58.
		5238.	3.3	0.0	5.3	58.
		5314.	3.3	0.0	5.3	58.
		5390.	3.3	0.0	5.3	58.
		5466.	3.3	0.0	5.3	58.
		5542.	3.3	0.0	5.3	58.
		5618.	3.3	0.0	5.3	58.
		5694.	3.3	0.0	5.3	58.
		5770.	3.3	0.0	5.3	58.
		5846.	3.3	0.0	5.3	58.
		5922.	3.3	0.0	5.3	58.
		5998.	3.3	0.0	5.3	58.
		6074.	3.3	0.0	5.3	58.
		6150.	3.3	0.0	5.3	58.
		6226.	3.3	0.0	5.3	58.
		6302.	3.3	0.0	5.3	58.
		6378.	3.3	0.0	5.3	58.
		6454.	3.3	0.0	5.3	58.
		6530.	3.3	0.0	5.3	58.
		6606.	3.3	0.0	5.3	58.
		6682.	3.3	0.0	5.3	58.
		6758.	3.3	0.0	5.3	58.
		6834.	3.3	0.0	5.3	58.
		6910.	3.3	0.0	5.3	58.
		6986.	3.3	0.0	5.3	58.
		7062.	3.3	0.0	5.3	58.
		7138.	3.3	0.0	5.3	58.
		7214.	3.3	0.0	5.3	58.
		7290.	3.3	0.0	5.3	58.
		7366.	3.3	0.0	5.3	58.
		7442.	3.3	0.0	5.3	58.
		7518.	3.3	0.0	5.3	58.
		7594.	3.3	0.0	5.3	58.
		7670.	3.3	0.0	5.3	58.
		7746.	3.3	0.0	5.3	58.
		7822.	3.3	0.0	5.3	58.
		7898.	3.3	0.0	5.3	58.
		7974.	3.3	0.0	5.3	58.
		8050.	3.3	0.0	5.3	58.
		8126.	3.3	0.0	5.3	58.
		8202.	3.3	0.0	5.3	58.
		8278.	3.3	0.0	5.3	58.
		8354.	3.3	0.0	5.3	58.
		8430.	3.3	0.0	5.3	58.
		8506.	3.3	0.0	5.3	58.
		8582.	3.3	0.0	5.3	58.
		8658.	3.3	0.0	5.3	58.
		8734.	3.3	0.0	5.3	58.
		8810.	3.3	0.0	5.3	58.
		8886.	3.3	0.0	5.3	58.
		8962.	3.3	0.0	5.3	58.
		9038.	3.3	0.0	5.3	58.
		9114.	3.3	0.0	5.3	58.
		9190.	3.3	0.0	5.3	58.
		9266.	3.3	0.0	5.3	58.
		9342.	3.3	0.0	5.3	58.
		9418.	3.3	0.0	5.3	58.
		9494.	3.3	0.0	5.3	58.
		9570.	3.3	0.0	5.3	58.
		9646.	3.3	0.0	5.3	58.
		9722.	3.3	0.0	5.3	58.
		9798.	3.3	0.0	5.3	58.
		9874.	3.3	0.0	5.3	58.
		9950.	3.3	0.0	5.3	58.
		10026.	3.3	0.0	5.3	58.
		10102.	3.3	0.0	5.3	58.
		10178.	3.3	0.0	5.3	58.
		10254.	3.3	0.0	5.3	58.
		10330.	3.3	0.0	5.3	58.
		10406.	3.3	0.0	5.3	58.
		10482.	3.3	0.0	5.3	58.
		10558.	3.3	0.0	5.3	58.
		10634.	3.3	0.0	5.3	58.
		10710.	3.3	0.0	5.3	58.
		10786.	3.3	0.0	5.3	58.
		10862.	3.3	0.0	5.3	58.
		10938.	3.3	0.0	5.3	58.
		11014.	3.3	0.0	5.3	58.
		11090.	3.3	0.0	5.3	58.
		11166.	3.3	0.0	5.3	58.
		11242.	3.3	0.0	5.3	58.
		11318.	3.3	0.0	5.3	58.
		11394.	3.3	0.0	5.3	58.
		11470.	3.3	0.0	5.3	58.
		11546.	3.3	0.0	5.3	58.
		11622.	3.3	0.0	5.3	58.
		11698.	3.3	0.0	5.3	58.
		11774.	3.3	0.0	5.3	58.
		11850.	3.3	0.0	5.3	58.
		11926.	3.3	0.0	5.3	58.
		12002.	3.3	0.0	5.3	58.
		12078.	3.3	0.0	5.3	58.
		12154.	3.3	0.0	5.3	58.
		12230.	3.3	0.0	5.3	58.
		12306.	3.3	0.0	5.3	58.
		12382.	3.3	0.0	5.3	58.
		12458.	3.3	0.0	5.3	58.
		12534.	3.3	0.0	5.3	58.
		12610.	3.3	0.0	5.3	58.
		12686.	3.3	0.0	5.3	58.
		12762.	3.3	0.0	5.3	58.
		12838.	3.3	0.0	5.3	58.
		12914.	3.3	0.0	5.3	58.
		12990.	3.3	0.0	5.3	58.
		13066.	3.3	0.0	5.3	58.
		13142.	3.3	0.0	5.3	58.
		13218.	3.3	0.0	5.3	58.
		13294.	3.3	0.0	5.3	58.
		13370.	3.3	0.0	5.3	58.
		13446.	3.3	0.0	5.3	58.
		13522.	3.3	0.0	5.3	58.
		13598.	3.3	0.0	5.3	58.
		13674.	3.3	0.0	5.3	58.
		13750.	3.3	0.0	5.3	58.
		13826.	3.3	0.0	5.3	58.
		13902.	3.3	0.0	5.3	58.
		13978.	3.3	0.0	5.3	58.
		14054.	3.3	0.0	5.3	58.
		14130.	3.3	0.0	5.3	58.
		14206.	3.3	0.0	5.3	58.
		14282.	3.3	0.0	5.3	58.
		14358.	3.3	0.0	5.3	58.
		14434.	3.3	0.0	5.3	58.
		14510.	3.3	0.0	5.3	58.
		14586.	3.3	0.0	5.3	58.
		14662.	3.3	0.0	5.3	58.
		14738.	3.3	0.0	5.3	58.
		14814.	3.3	0.0	5.3	58.
		14890.	3.3	0.0	5.3	58.
		14966.	3.3	0.0	5.3	58.
		15042.	3.3	0.0	5.3	58.
		15118.	3.3	0.0	5.3	58.
		15194.	3.3	0.0	5.3	58.
		15270.	3.3	0.0	5.3	58.
		15346.	3.3	0.0	5.3	58.
		15422.	3.3	0.0	5.3	58.
		15498.	3.3	0.0	5.3	58.
		15574.	3.3	0.0	5.3	58.
		15650.	3.3	0.0	5.3	58.
		15726.	3.3	0.0	5.3	58.
		15802.	3.3	0.0	5.3	58.
		15878.	3.3	0.0	5.3	58.
		15954.	3.3	0.0	5.3	58.
		16030.	3.3	0.0	5.3	58.
		16106.	3.3	0.0	5.3	58.
		16182.	3.3	0.0	5.3	58.
		16258.	3.3	0.0	5.3	58.
		16334.	3.3	0.0	5.3	58.
		16410.	3.3	0.0	5.3	58.
		16486.	3.3	0.0	5.3	58.
		16562.	3.3	0.0	5.3	58.
		16638.	3.3	0.0	5.3	58.
		16714.	3.3	0.0	5.3	58.
		16790.	3.3	0.0	5.3	58.
		16866.	3.3	0.0	5.3	58.
		16942.	3.3	0.0	5.3	58.
		17018.	3.3	0.0	5.3	58.
		17094.	3.3	0.0	5.3	58.
		17170.	3.3	0.0	5.3	58.
		17246.	3.3	0.0	5.3	58.
		17322.	3.3	0.0	5.3	58.
		17398.	3.3	0.0	5.3	58.
		17474.	3.3	0.0	5.3	58.
		17550.	3.3	0.0	5.3	58.
		17626.	3.3	0.0	5.3	58.
		17702.	3.3	0.0	5.3	58.
		17778.	3.3	0.0	5.3	58.
		17854.	3.3	0.0	5.3	58.
		17930.	3.3	0.0	5.3	58.
		18006.	3.3	0.0	5.3	58.
		18082.	3.3	0.0	5.3	58.
		18158.	3.3	0.0		

COL CB TRACT

ELEV 2042 METERS

SOUNDING ID 2011

DATE 09/01/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SFC	2192	16.46	-0.81	0.0	0.61	2.6	360.
1:9	150	2342	15.65	-1.71	-2.31	-0.48	2.9	22.
1:8	300	2500.	13.94	-1.37	-3.40	-0.95	2.9	334.
2:1	458.	2542.	12.55	-0.28	-1.98	1.48	3.4	332.
3:1	500	2542.	12.29	-3.10	-1.44	0.36	3.2	332.
8:1	958.	3000.	8.67	-4.03	-2.56	1.81	2.6	68.
12:2	1958.	4000.	-0.11	-5.24	-1.11	1.42		
19:2	2958.	5000.	-0.13		-1.51			

COL CB TRACT

ELEV 2042 METERS

SOUNDING ID 2011

DATE 09/01/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:0	0.	42.	0.0	-2.5	6.5	0.
0:5	78.	2014.	0.1	-2.5	2.5	359.
1:0	153.	2194.	-0.4	-2.5	2.5	11.
1:2	331.	2273.	0.8	-2.5	2.5	332.
2:0	406.	2366.	1.5	-2.5	3.5	329.
2:4	482.	2448.	1.7	-2.5	3.5	330.
3:0	558.	2520.	1.5	-2.5	3.5	330.
3:4	634.	2600.	1.0	-2.5	3.5	349.
4:0	710.	2676.	0.2	-1.0	1.4	66.
4:5	787.	2752.	1.7	-1.1	1.4	55.
5:0	863.	2829.	2.5	-1.1	2.5	60.
5:9	939.	2905.	2.5	-1.0	2.5	87.
6:0	1017.	2981.	2.5	-0.3	2.5	89.
6:5	1093.	3059.	3.0	-0.0	2.5	85.
7:0	1169.	3135.	3.0	-0.0	2.5	89.
7:1	1245.	3211.	3.0	-0.0	2.5	89.
7:8	1321.	3287.	3.0	-0.0	2.5	89.
8:0	1398.	3363.	3.0	-0.0	2.5	89.
8:9	1474.	3440.	3.0	-0.0	2.5	89.
9:0	1550.	3516.	3.0	-0.0	2.5	89.
10:0	1626.	3592.	3.0	-0.0	2.5	89.
11:0	1702.	3668.	3.0	-0.0	2.5	89.
11:1	1779.	3744.	3.0	-0.0	2.5	89.
11:2	1855.	3821.	3.0	-0.0	2.5	89.
12:0		3897.	3.0	-0.0	2.5	89.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1941
DATE 09/03/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SFC	2192	20.03	-0.88	0.0	1.00	0.5	225.
1:0	150	2342	19.14	-1.35	-2.29	0.64	2.4	167.
2:0	300	2500.	17.81	-1.35	-1.59	0.64	0.9	205.
3:0	458.	2542	16.46	-0.00	0.0	1.93	1.7	274.
3:3	500	3000.	14.92	-1.53	0.89	2.04	2.0	285.
6:8	958.	4000.	17.65	-7.27	-2.02	0.40		292.
12:8	1958.	5000.	0.36	-7.30	-1.51	1.42		
19:4	2958.							

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1941
DATE 09/03/76 TIME 06:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:0	0.	2042.	0.4	0.4	0.5	225.
0:5	76.	2118.	0.5	2.2	2.2	193.
1:0	129.	2194.	-0.5	2.2	2.2	167.
1:5	383.	2271.	-1.0	0.0	2.0	147.
2:0	533.	2342.	1.0	0.2	1.0	208.
2:5	612.	2425.	1.9	0.2	1.0	227.
3:0	768.	2501.	1.4	0.6	1.0	275.
3:5	918.	2578.	1.4	0.2	1.0	294.
4:0	993.	2654.	1.2	0.2	1.0	262.
4:5	1040.	2730.	1.2	0.2	1.0	274.
5:0	993.	2806.	1.6	0.3	1.2	282.
5:5	993.	2882.	0.0	0.4	1.5	289.
6:0	1069.	2959.	2.0	1.8	2.7	285.
6:5	1145.	3035.	2.2	1.5	3.2	299.
7:0	1211.	3117.	2.2	1.0	2.5	292.
7:5	1298.	3200.	2.1	0.5	3.1	315.
8:0	1374.	3280.	2.3	0.3	3.0	310.
8:5	1450.	3349.	2.3	0.2	3.4	304.
9:0	1526.	3416.	1.4	0.3	2.7	331.
9:5	1602.	3492.	3.3	0.3	2.4	369.
10:0	1675.	3568.	3.3	0.4	2.5	377.
11:0	1755.	3644.	3.3	0.2	2.5	399.
11:5	1831.	3721.	3.4	0.2	2.5	318.
12:0		3797.		0.3	2.5	326.
		3873.		0.5	2.7	308.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1227
 DATE 09/03/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:00	SFC	2192	23.53	-0.95	0.58	0.35	1.04	360.
1:00	150	2342	22.58	-1.31	-2.25	0.68	1.25	344.
2:00	300	2500.	21.94	-1.22	-1.74	1.19	2.52	6.
3:00	458.	2542	19.94	-0.10	-1.74	1.19	1.24	318.
3:33	500	3000.	19.82	-0.11	-2.47	0.46	1.12	316.
6:00	958.	4000.	16.14	-7.69	-2.93	0.00		292.
12:04	1958.	5000.	1.12	-8.02	-1.32	1.61		
19:09	3956.	6000.	-4.19	-5.31	-2.68	0.25		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1227
 DATE 09/03/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:00	0.	2042.	0.9	-1.8	1.0	360.
0:05	76.	2118.	0.6	-0.4	1.2	315.
1:05	1529.	2194.	0.2	-2.2	2.5	345.
1:22	305.	2347.	-0.3	-2.5	2.5	4.
2:05	381.	2423.	-0.8	-1.0	1.0	6.
3:05	457.	2499.	0.2	-0.9	1.2	20.
3:30	533.	2575.	1.1	-0.2	1.6	318.
4:05	610.	2652.	1.0	-0.8	3.0	306.
4:30	686.	2728.	1.7	-0.9	3.1	319.
5:05	762.	2804.	1.5	-0.4	2.9	306.
5:30	838.	2880.	1.0	-0.7	2.8	311.
6:05	914.	2956.	1.9	-0.2	2.8	309.
6:30	991.	3033.	1.7	-0.7	2.9	303.
7:05	1067.	3109.	1.0	-0.0	2.5	308.
7:30	1143.	3185.	1.0	-0.3	2.8	305.
8:05	1219.	3261.	1.0	-0.7	2.9	302.
8:30	1295.	3337.	1.0	-1.0	2.5	300.
9:05	1372.	3414.	2.1	-0.3	2.0	332.
9:30	1448.	3490.	1.0	-1.8	1.5	340.
10:05	1524.	3566.	0.9	-0.7	0.7	349.
10:30	1600.	3642.	0.0	-0.6	0.3	350.
11:05	1678.	3720.	0.0	-0.9	0.3	359.
11:30	1758.	3800.	0.0	-1.5	0.3	351.
12:00	1834.	3876.	0.0	-	0.3	351.

COL CH TRACT ELFV 2042 METERS SOUNDING ID 992
 DATE 09/07/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1 0	SFC	2192	12.09	-0.73	0.0	1.48	0.5	360.
2 0	150	2342	11.36	-0.55	-1.45	1.84	1.3	310.
3 0	300	2500.	10.81	-0.55	-1.09	1.84	0.1	300.
4 0	458.	2642.	9.88	-0.73	-1.64	1.29	1.2	70.
5 0	500	3000.	9.89	-0.19	-1.64	1.29	1.3	65.
6 0	958.	4000.	8.30	-1.60	0.74	3.06	3.2	84.
12 8	1958.	4000.	1.60	-6.69	-1.88	1.05		
19 4	2958.	5000.	-4.67	-6.27	-1.53	1.40		

COL CH TRACT ELFV 2042 METERS SOUNDING ID 992
 DATE 09/07/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPED M/S	WND DIR DEG
0 5	0.	2042.	0.8	-0.7	0.5	360.
0 5	76.	2118.	0.9	-0.9	1.1	310.
1 0	152.	2194.	0.1	-0.2	1.3	310.
1 5	305.	2271.	0.0	-0.1	0.2	10.
2 0	381.	2347.	-1.0	-0.9	0.1	40.
3 0	457.	2423.	-1.1	-0.4	1.3	70.
3 5	533.	2499.	-1.2	-0.7	1.4	61.
4 0	610.	2575.	-1.7	-0.8	1.9	65.
4 5	686.	2652.	-2.1	-1.4	2.4	60.
5 0	762.	2728.	-3.0	-1.4	3.8	70.
5 5	838.	2804.	-3.5	-1.3	4.1	71.
6 0	914.	2880.	-4.0	-0.8	4.6	80.
6 5	991.	2956.	-2.5	-0.2	2.9	31.
7 0	1067.	3033.	0.1	-0.1	0.9	359.
7 5	1143.	3109.	0.6	-0.1	3.1	330.
8 0	1219.	3185.	2.4	-4.1	4.8	293.
8 5	1295.	3261.	6.3	-1.8	4.7	272.
9 0	1372.	3337.	6.3	0.2	6.3	269.
9 5	1448.	3414.	5.5	0.0	9.5	270.
10 0	1524.	3490.				
	1600.	3566.				
		3642.				

COL CB TRACT ELEV 2042 METERS SOUNDING ID 0
DATE 09/07/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SEC	2192	12:92	-0:82	0:71	0:22	2:0	360:
12:0	7 300	2342	12:10	-1:56	-2:73	0:20	1:3	319:
3:0	? 458	2500	10:54	-1:40	-3:29	0:36	2:3	286:
3:2	? 500	2542	9:14	-0:47	-3:93	-0:01	3:6	263:
6:2	958	3000	8:68	-0:13	-2:80	0:13	3:8	259:
12:7	1958	4000	3:73	-7:28	-3:24	-0:31	4:0	248:
18:7	2958	5000	-7:41	-4:68	-1:35	1:58		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 0
DATE 09/07/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-CUMP M/S	WND SPEED M/S	WND DIR DEG
0:5	0	2042	0:6	-2:3	2	360:
0:5	76	2118	1:7	-1:8	1	319:
1:0	152	2219	0:6	-0:4	1	319:
1:0	307	2349	2:3	-0:6	2	304:
2:0	383	2425	3:6	-0:1	2	271:
3:0	461	2503	3:9	0:5	3	225:
4:0	544	2586	3:3	1:8	4	264:
5:0	621	2663	3:1	1:1	7	182:
5:0	708	2742	3:5	1:1	3	234:
5:0	778	2820	3:7	1:6	6	249:
5:0	854	2896	3:9	1:4	0	252:
5:0	930	2972	3:3	1:9	4	252:
6:0	1005	3049	3:5	1:0	6	252:
7:0	1081	3127	3:5	1:0	5	252:
7:0	1161	3203	3:4	1:1	5	252:
8:0	1237	3279	3:5	1:1	5	252:
8:0	1314	3356	3:4	1:1	5	252:
9:0	1390	3432	3:5	1:2	5	252:
9:0	1466	3508	3:4	1:2	5	252:

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2279
DATE 09/09/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:00	SFC	2192	11.17	-0.00	0.00	3.47	1.0	360.
1:00	150	2342	11.10	-0.08	0.54	0.93	1.5	26.
1:00	300	2500.	10.34	-0.75	-2.00	0.83	2.1	79.
1:00	450	2542	9.81	-0.54	-1.09	1.43	3.6	113.
1:00	500	3000.	8.21	-1.59	-2.02	0.91	4.7	115.
1:00	958.	4000.	3.88	-4.34	-2.42	5.35		96.
1:00	1958.	5000.	0.64	-3.24	-1.32	1.61		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2279
DATE 09/09/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:05	0.	2042.	0.2	-	0.9	360.
0:05	76.	2118.	-	-	1.0	15.
0:05	152.	2271.	-	-	1.1	16.
0:05	305.	2347.	-	-	1.2	355.
0:05	461.	2426.	-	-	1.5	577.
0:05	613.	2503.	-	-	2.0	77.
0:05	768.	2579.	-	-	3.4	115.
0:05	919.	2655.	-	-	4.4	115.
0:05	1070.	2731.	-	-	4.5	194.
0:05	1228.	2804.	-	-	5.9	102.
0:05	1394.	2880.	-	-	3.3	194.
0:05	1570.	2960.	-	-	4.4	95.
0:05	1746.	3036.	-	-	4.9	91.
0:05	1929.	3112.	-	-	4.4	101.
0:05	2129.	3188.	-	-	3.3	113.
0:05	2341.	3265.	-	-	3.2	113.
0:05	2541.	3341.	-	-	3.2	140.
0:05	2751.	3417.	-	-	3.3	133.
0:05	2951.	3493.	-	-	3.2	137.
0:05	3151.	3569.	-	-	3.4	127.
0:05	3351.	3646.	-	-	4.8	161.
0:05	3551.	3722.	-	-	5.2	140.
0:05	3751.	3798.	-	-		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2368

DATE 09/09/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SFC	2192	15.56	0.00	0.0	2.93	0.52	360.
1:9	150	2342	15.12	-0.44	0.42	1.50	2.11	92.
3:0	458.	2500.	14.10	-1.01	-1.22	-0.30	2.00	145.
3:2	500.	2542.	13.83	-0.28	-2.51	-0.41	2.02	153.
6:9	958.	3000.	13.97	-3.39	-2.64	-0.72	3.28	162.
9:5	*1500	3542.	6.34		-3.40	-5.32		197.
10:0	*1576	3618	7.65		-2.77	5.69		
12:5	1958.	4000.	6.81	-3.63	-2.58	0.35		
19:0	2958.	5000.	-0.31	-7.13	-2.65	0.28		
25:2	3958.	6000.	-7.61	-7.29	-1.74	1.19		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2368

DATE 09/09/76 TIME 12:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	II-COMP M/S	V-CUMP M/S	WIND SPEED M/S	WIND DIR DEG
0:0	0.	2042.	0.0	-0.5	0.5	360.
0:5	76.	2118.	-1.3	-0.6	1.2	121.
1:5	157.	2199.	-2.1	-0.8	2.1	190.
2:5	309.	2275.	-0.1	1.6	2.8	178.
3:0	386.	2351.	-1.3	1.9	1.1	141.
3:5	462.	2428.	-0.7	1.8	2.3	144.
4:5	541.	2504.	-0.7	1.4	0.5	154.
5:0	618.	2583.	-0.7	1.9	2.4	171.
5:5	694.	2660.	-1.2	1.9	2.2	147.
6:5	770.	2736.	-0.2	1.6	1.2	147.
7:5	846.	2812.	-0.5	1.4	2.6	174.
8:5	921.	2888.	-0.5	1.2	2.4	178.
9:5	1021.	2970.	1.5	2.3	2.7	192.
10:5	1113.	3063.	2.7	2.8	3.3	208.
11:5	1195.	3155.	2.3	2.2	3.3	217.
12:5	1272.	3247.	2.3	2.2	3.4	226.
13:5	1348.	3339.	2.3	2.2	3.3	239.
14:5	1424.	3430.	2.2	2.1	3.3	240.
15:5	1500.	3522.	2.3	2.2	3.3	228.
16:5	1576.	3614.	2.3	2.2	3.4	228.
17:5	1653.	3706.	2.3	2.0	3.4	228.
18:5	1729.	3798.	2.3	2.0	4.5	230.
19:5		3895.	2.3	2.0	4.5	230.
20:5		3971.	2.3	2.0	4.5	230.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2331
 DATE 09/15/76 TIME 06:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T SID	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	150	2192	14.29	-0.51	0.0	0.90	14.8	149.
2:0	300	2342	13.60	-0.19	-2.02	3.10	11.0	177.
3:0	458.	2500.	12.31	-0.93	-3.58	-0.65	15.0	162.
3:3	500.	2542	12.33	-0.34	-3.58	-0.65	15.5	186.
5:5	958.	3000.	7.85	-4.48	-2.44	0.49	18.9	184.
12:4	1958.	4000.	2.74	-5.11	-1.61	1.32		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2331
 DATE 09/15/76 TIME 06:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:5	76.	2118.			5.8	31.
1:0	152.	2194.	-2.9	-5.0	15.1	152.
1:5	229.	2271.	-7.0	13.4	14.5	145.
2:0	305.	2347.	-4.9	17.0	11.1	179.
2:5	381.	2423.	-0.3	11.1	10.9	190.
3:0	457.	2499.	1.8	10.7	15.0	162.
3:5	533.	2575.	-4.7	14.3	15.8	205.
4:0	629.	2671.	6.7	14.3	15.4	169.
4:5	735.	2777.	-3.0	15.1	19.4	182.
5:0	821.	2863.	0.8	17.4	17.8	189.
5:5	909.	2951.	2.3	17.6	19.3	176.
6:0	986.	3028.	-1.8	18.5	18.7	188.
6:5	1063.	3105.	2.3	16.7	16.	186.

THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2523
 DATE 09/15/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T SID	D/T 300M	D/T LAPSE	WS M/S	WD DEG
0.8	150	2192	17.15	-3.12	0.0	0.62	6.5	122.
1.6	300	2342	14.04	-0.76	-2.31	0.10	5.1	160.
2.9	458.	2500.	13.24		-2.63		5.6	202.
5.9	500	2542					6.0	191.
12.4	958.	3000.					6.1	195.
	1958.	4000.					6.7	214.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2523
 DATE 09/15/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.5	76.	2118.	-4.6	2.8	4.8	116.
1.5	218.	2336.	-6.3	4.0	8.1	126.
2.5	294.	2412.	-1.3	5.7	5.4	100.
3.5	448.	2488.	-3.3	0.0	5.0	204.
4.5	522.	2564.	0.6	5.1	5.2	180.
5.5	675.	2641.	1.9	6.5	6.7	195.
6.5	751.	2717.	2.4	8.9	7.3	204.
7.5	827.	2793.	1.2	8.9	7.1	195.
8.5	903.	2869.	1.9	5.2	6.1	192.
9.5	980.	2945.	1.4	7.4	7.4	195.
10.5	1056.	3022.	5.7	5.0	5.8	227.
11.5	1132.	3098.	5.7	6.9	7.8	222.
12.5	1208.	3174.	3.0	5.1	7.0	219.
13.5	1284.	3250.	3.7	6.4	7.0	215.
14.5	1361.	3326.	4.7	6.6	8.1	210.
15.5	1437.	3403.	5.3	6.2	9.9	230.
16.5	1513.	3479.	4.7	8.9	8.4	217.
17.5	1589.	3555.	5.3	8.9	9.9	205.
18.5	1665.	3631.	4.6	8.9	7.7	216.
19.5	1742.	3707.	4.2	8.9	6.7	215.
20.5	1818.	3784.	3.5	8.9	6.7	215.
21.5	1894.	3860.	4.4	8.9	6.7	215.
22.5	1970.	3936.	5.7	8.9	6.7	215.

THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2567
 DATE 09/17/76 TIME 08:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SFC	2192	17.50	-1.43	0.33	1.60	15.0	334.
1:50	150	2342	16.07	-1.01	-1.64	0.08	24.2	330.
3:0	300	2500	13.29	-1.77	-2.54	0.39	15.0	333.
3:3	450	2542	12.94	-0.35	-2.54	0.55	16.0	336.
6:2	500	23000	18.82	-4.11	-3.47	-0.20	14.5	331.
12:1	958	4000	-1.47	-9.44	-3.73	-0.83	11.3	333.
18:2	1958	5000	-10.21	-9.20	-3.73			

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2567
 DATE 09/17/76 TIME 08:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:0	76	2118	4.7	-9.7	10.2	334.
1:0	129	2194	6.1	-13.6	15.2	332.
1:5	305	2271	10.1	-21.2	24.0	333.
2:0	381	2347	12.0	-10.2	19.5	330.
3:0	458	2423	17.0	-13.8	19.3	333.
3:5	534	2500	6.4	-15.1	17.4	335.
4:0	611	2576	7.4	-15.8	19.4	331.
4:5	687	2653	9.4	-16.9	20.5	330.
5:0	771	2729	10.4	-24.2	21.5	330.
5:5	851	2803	6.7	-10.6	17.6	334.
6:0	927	2899	7.7	-15.5	19.6	354.
6:5	1005	2964	1.6	-6.5	4.5	343.
7:0	1091	3047	1.6	-9.0	9.7	337.
7:5	1171	3133	3.4	-6.4	8.7	337.
8:0	1247	3219	3.4	-9.4	8.7	337.
8:5	1323	3305	4.0	-6.3	8.7	337.
9:0	1411	3391	4.0	-6.3	8.7	337.
9:5	1494	3453	4.7	-6.3	8.7	337.
10:0	1584	3526	4.7	-6.3	8.7	337.
10:5	1687	3629	5.3	-13.0	10.4	340.
11:0	1789	3721	5.4	-13.7	10.4	341.
11:5	1872	3814	5.4	-13.7	10.4	344.
12:0	1948	3910	4.9	-10.2	9.7	335.
12:5	2025	4007	7.3	-15.6	17.5	332.
13:0	2107	4149	1.6	-5.9	3.0	335.
13:5	2183	4225	2.2	-5.9	3.0	335.
14:0	2265	4307	2.2	-5.9	3.0	341.

THE WIND DATA ARE MISSING



COL CB TRACT ELEV 2042 METERS SOUNDING ID 2406
DATE 09/17/76 TIME 14:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME	HEIGHT	HEIGHT	TEMP	D/T	D/T	D/T	WS	WD
MIN	M (AGL)	M (MSL)	DFG C	STD	300M	LAPSE	M/S	DEG
1:00	SEC	2192	13.77	-0.94	0.0	1.06	M	M
1:02	150	2342	12.84	-1.12	-1.53	1.40	15.0	336.
1:03	300	2500	11.71	-1.09	-1.53	1.40	14.6	338.
1:04	458.	2500	11.45	-0.07	-1.71	1.22	14.2	343.
1:05	500	2542	11.46	-0.17	-1.71	1.22	14.2	344.
1:06	958.	2500	17.94	-3.51	-2.09	0.84	24.0	348.
1:07	1958.	4000.	-0.64	-3.59	-1.65	1.11	24.2	350.
1:08	2958.	5000.	-4.26	-3.61	-1.65	1.27		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2406
DATE 09/17/76 TIME 14:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME	HEIGHT	HEIGHT	U-COMP	V-COMP	WIND	WIND	WIND
MIN	M (AGL)	M (MSL)	M/S	M/S	M/S	SPEED	DIR
0:00	76.	2118.	3.2	-7.0	7.2	335.	335.
0:01	152.	2194.	6.2	-13.5	15.0	334.	334.
0:02	229.	2271.	9.5	-12.5	15.0	330.	330.
0:03	305.	2347.	9.5	-13.5	16.0	340.	340.
0:04	381.	2423.	5.8	-14.0	13.0	345.	345.
0:05	457.	2499.	3.0	-13.5	12.0	347.	347.
0:06	533.	2575.	3.7	-12.2	15.0	346.	346.
0:07	610.	2652.	3.3	-14.5	10.0	348.	348.
0:08	686.	2728.	3.4	-16.5	14.0	349.	349.
0:09	762.	2804.	4.8	-24.3	23.0	347.	347.
0:10	838.	2880.	5.3	-22.5	25.0	352.	352.
0:11	914.	2956.	4.1	-19.5	19.0	350.	350.
0:12	991.	3033.	3.4	-16.7	16.0	352.	352.
0:13	1067.	3109.	3.2	-17.0	16.0	354.	354.
0:14	1143.	3185.	2.4	-13.7	13.0	354.	354.
0:15	1219.	3261.	2.5	-11.6	11.0	352.	352.
0:16	1295.	3337.	2.9	-13.0	13.0	359.	359.
0:17	1372.	3414.	1.4	-17.0	17.0	352.	352.
0:18	1448.	3490.	1.0	-17.0	17.0	354.	354.
0:19	1524.	3566.	1.0	-13.7	13.0	352.	352.
0:20	1600.	3641.	0.5	-18.0	18.0	350.	350.
0:21	1676.	3717.	0.5	-24.7	24.0	350.	350.
0:22	1752.	3793.	0.5	-24.7	24.0	350.	350.
0:23	1828.	3869.	0.5	-10.9	11.0	351.	351.
0:24	1904.	3945.	0.5	-10.9	11.0	351.	351.
0:25	1980.	4021.	0.5	-10.9	11.0	351.	351.
0:26	2056.	4097.	0.5	-10.9	11.0	351.	351.
0:27	2132.	4173.	0.5	-10.9	11.0	351.	351.
0:28	2208.	4249.	0.5	-10.9	11.0	351.	351.
0:29	2284.	4325.	0.5	-10.9	11.0	351.	351.
0:30	2360.	4401.	0.5	-10.9	11.0	351.	351.

THE WIND DATA ARE MISSING

COL CB TRACT	ELEV 2042 METERS	SOUNDING ID	0
DATE 09/21/76	TIME 06:45MST	ASCENT RATE 500 FPM	DATA INTERVAL 15 SEC.

TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:00	950	192	12.7	1.46	0.90	2.03	MMMMMM	M
1:00	1500	2342	13.9	0.48	-0.26	4.18	MMMMMM	
1:00	3000	2542	13.4	0.42	-1.16	4.77	MMMMMM	
1:00	4500	2542	13.0	0.46	-2.34	0.59	MMMMMM	
1:00	5500	3000	19.3	0.71	-2.92	0.01	MMMMMM	
1:00	9500	4000	0.7	0.60	-2.26	0.67	MMMMMM	

COL CB TRACT	ELEV 2042 METERS	SOUNDING ID	0
DATE 09/21/76	TIME 06:45MST	ASCENT RATE 500 FPM	DATA INTERVAL 15 SEC.

TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0000	100	100	0.0	0.0	0.0	000
0005	100	100	0.0	0.0	0.0	000
0010	100	100	0.0	0.0	0.0	000
0015	100	100	0.0	0.0	0.0	000
0020	100	100	0.0	0.0	0.0	000
0025	100	100	0.0	0.0	0.0	000
0030	100	100	0.0	0.0	0.0	000
0035	100	100	0.0	0.0	0.0	000
0040	100	100	0.0	0.0	0.0	000
0045	100	100	0.0	0.0	0.0	000
0050	100	100	0.0	0.0	0.0	000
0055	100	100	0.0	0.0	0.0	000
0100	100	100	0.0	0.0	0.0	000
0105	100	100	0.0	0.0	0.0	000
0110	100	100	0.0	0.0	0.0	000
0115	100	100	0.0	0.0	0.0	000
0120	100	100	0.0	0.0	0.0	000
0125	100	100	0.0	0.0	0.0	000
0130	100	100	0.0	0.0	0.0	000
0135	100	100	0.0	0.0	0.0	000
0140	100	100	0.0	0.0	0.0	000
0145	100	100	0.0	0.0	0.0	000
0150	100	100	0.0	0.0	0.0	000
0155	100	100	0.0	0.0	0.0	000
0200	100	100	0.0	0.0	0.0	000
0205	100	100	0.0	0.0	0.0	000
0210	100	100	0.0	0.0	0.0	000
0215	100	100	0.0	0.0	0.0	000
0220	100	100	0.0	0.0	0.0	000
0225	100	100	0.0	0.0	0.0	000
0230	100	100	0.0	0.0	0.0	000
0235	100	100	0.0	0.0	0.0	000
0240	100	100	0.0	0.0	0.0	000
0245	100	100	0.0	0.0	0.0	000
0250	100	100	0.0	0.0	0.0	000
0255	100	100	0.0	0.0	0.0	000
0300	100	100	0.0	0.0	0.0	000
0305	100	100	0.0	0.0	0.0	000
0310	100	100	0.0	0.0	0.0	000
0315	100	100	0.0	0.0	0.0	000
0320	100	100	0.0	0.0	0.0	000
0325	100	100	0.0	0.0	0.0	000
0330	100	100	0.0	0.0	0.0	000
0335	100	100	0.0	0.0	0.0	000
0340	100	100	0.0	0.0	0.0	000
0345	100	100	0.0	0.0	0.0	000
0350	100	100	0.0	0.0	0.0	000
0355	100	100	0.0	0.0	0.0	000
0400	100	100	0.0	0.0	0.0	000
0405	100	100	0.0	0.0	0.0	000
0410	100	100	0.0	0.0	0.0	000
0415	100	100	0.0	0.0	0.0	000
0420	100	100	0.0	0.0	0.0	000
0425	100	100	0.0	0.0	0.0	000
0430	100	100	0.0	0.0	0.0	000
0435	100	100	0.0	0.0	0.0	000
0440						

THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 0
DATE 09/21/76 TIME 12:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SEC		15.332	-0.90	0.0	1.51	M 8	M 209.
2:0	150	2192	14.779	-0.63	-1.432	0.61	1.7	179.
3:0	300	2342	13.79	-1.77	-2.360	-0.67	2.5	197.
4:0	458.	2500.	11.443	-0.50	-3.60	-0.67	2.5	195.
5:0	500	2542.	11.555	-3.43	-3.10	-0.18	1.5	97.
6:2	958.	3000.	2.955	-5.07	-0.74	2.18		
12:7	1958.	4000.						

COL CB TRACT ELEV 2042 METERS SOUNDING ID 0
DATE 09/21/76 TIME 12:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:0	76.	2118.	0.97	1.1	1.8	210.
1:0	152.	2194.	0.93	1.6	2.2	208.
2:0	305.	2271.	-0.03	2.2	1.2	171.
3:0	381.	2347.	-0.05	2.0	2.2	180.
4:0	457.	2423.	0.77	3.2	1.5	193.
5:0	534.	2499.	0.77	3.2	3.6	193.
6:0	618.	2576.	0.23	3.6	7.0	185.
7:0	694.	2650.	1.20	3.2	2.2	110.
8:0	770.	2736.	2.03	2.2	2.2	127.
9:0	846.	2812.	0.03	2.4	0.0	276.
10:0	923.	2888.	-0.03	0.0	3.4	235.
11:0	1007.	2965.	-1.40	0.6	1.8	151.
12:0	1087.	3051.	-1.40	0.6	1.8	151.
13:0	1163.	3129.	-2.35	0.7	4.4	158.
14:0	1239.	3205.	-3.57	0.4	4.5	93.
15:0	1315.	3281.	-3.57	0.4	3.3	101.
16:0	1392.	3357.	-3.02	0.4	1.3	189.
17:0	1468.	3434.	-3.02	0.4	3.3	117.
18:0	1544.	3510.	-3.02	0.4	3.3	176.
19:0	1620.	3586.	-1.66	2.5	5.4	143.
20:0	1696.	3662.	-1.66	2.5	5.4	143.
21:0	1773.	3738.	-1.66	2.5	5.4	143.
22:0	1849.	3815.	-1.66	2.5	5.4	143.
23:0	1925.	3891.	-1.66	2.5	5.4	143.
24:0		3967.	-1.66	2.5	5.4	143.

THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2123
 DATE 09/23/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
0.7	SFC	2192	6.71	-0.18	0.0	-1.34	M	M
1.3	150	2342	6.53	-2.15	-4.26	4.24	M	M
2.5	300	2500	4.38	-1.15	-1.31	1.06	M	M
3.5	458	2542	3.23	-0.19	-1.87	1.06	M	M
5.5	500	3000	3.04	-2.40	-0.0	2.93	M	M
12.1	958	4000	0.64	2.96	-0.56	2.37	M	M
	1958		3.60					

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2123
 DATE 09/23/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG

THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2061
 DATE 09/23/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:00	SFC	2192	6.80	-0.65	0.0	1.45	M	M
1:00	150	2342	6.15	-0.75	-1.48	1.44	M	M
3:00	300	2500	5.40	-0.85	-1.48	1.25	M	M
3:30	458	2542	4.55	-0.54	-1.86	1.06	M	M
3:30	500	3000	4.01	-0.41	-0.56	2.36	M	M
6:00	958	4000	1.60	-2.53	-0.19	2.74	M	M
12:00	1958	5000	0.07	-1.28	-0.19	0.64		
19:47	2958	6000	-3.21	-3.46	-2.72	0.21		
25:27	3958		-9.67	-6.46				

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2061
 DATE 09/23/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
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THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2179
DATE 09/25/76 TIME 07:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1.0	SFC	2192	4.64		0.0		0.0	0.
2.0	150	2342	4.45	-0.19	-0.93	2.00	M	M
3.0	300	2500.	3.79	-0.66	0.56	3.49	M	M
3.3	458.	2542	4.46	0.67	0.0	2.93	M	M
6.3	500	3000.	4.45	-0.01	-0.19	2.74	M	M
6.3	958.	3990.	2.46	-1.99	-2.25	0.68	M	M
12.8	*1948.	4000.	-3.80		3.81	6.74		
12.8	*1958.		-2.55	-5.02	3.82	6.75		
13.3	*2024	4066	-1.86		2.10	5.03		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2179
DATE 09/25/76 TIME 07:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2237
DATE 09/25/76 TIME 12:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		4.64		0.0		0.0	0.
1.0	150	2192	4.45	-0.19	-0.75	2.18	M	M
2.0	300	2342	3.79	-0.66	0.75	3.67	M	M
3.0	458.	2500.	4.62	0.84	0.56	3.49	M	M
3.3	500	2542	4.55	-0.07	-1.86	1.06	M	M
6.3	958.	3000.	0.66	-3.89	-1.70	1.23	M	M

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2237
DATE 09/25/76 TIME 12:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	2042.	0.0	0.0	0.0	0.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2058
 DATE 09/27/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:00	SEC		0.16		0.0			
2:00	150	2192	-0.13	-0.29	-0.38	2:79	M	M
3:00	300	2342	-0.80	-0.67	-1.14	1:60	M	M
4:00	450	2500	-1.25	-0.46	-1.33	1:03	M	M
5:00	500	2542	-1.46	-0.21	-1.90	1:20	M	M
6:00	958	3000	-4.38	-2.92	-1.72	6:03	M	M
*1945		3987	-10.07		3:10	6:81		
12:08		4000	-19.10	-4.72	3:88			
17:07		5000	-16.84	-7.74	-5:53	-2:60		

COL CB TRACT ELEV 2042 METERS SOUNDING ID 2058
 DATE 09/27/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
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THE WIND DATA ARE MISSING

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1965
DATE 09/27/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1.0	SFC	2192	4.30	-0.74	0.48	1.45	M 5.7	M 32.
2.0	150	2342	3.56	-1.13	-1.16	-0.23	7.5	38.
3.0	300	2500.	1.19	-1.24	-2.43	0.00	9.3	48.
4.0	450	2542	0.19	-1.07	-2.62	0.31	6.9	63.
5.0	500	3000.	0.01	-0.39	-0.19	0.74	5.5	59.
6.0	958.	4000.	-3.01	-1.94	0.00	2.93	7.5	311.
12.0	1958.	5000.	-4.75	-4.38	-1.35	1.58		
19.0	2958.		-9.22					

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1965
DATE 09/27/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	76.	2118.	-2.1	-3.7	4.8	0.
1.0	152.	2194.	-3.0	-4.9	5.8	32.
2.0	307.	2271.	-4.6	-6.8	7.0	32.
3.0	385.	2349.	-5.1	-8.7	7.3	39.
4.0	467.	2427.	-6.1	-8.7	7.8	48.
5.0	537.	2503.	-6.1	-6.0	7.3	33.
6.0	621.	2579.	-4.1	-1.9	7.1	41.
7.0	714.	2656.	-4.3	-5.7	6.5	35.
8.0	805.	2733.	-4.1	-4.0	5.5	32.
9.0	887.	2811.	-2.9	-2.5	5.0	33.
10.0	933.	2899.	0.8	-1.0	5.3	30.
11.0	1039.	2975.	0.6	-2.2	5.6	30.
12.0	1186.	3120.	1.1	-2.2	6.8	30.
13.0	1338.	3270.	1.1	-2.2	8.1	31.
14.0	1490.	3420.	1.0	-2.2	8.5	33.
15.0	1647.	3570.	0.4	-2.2	8.5	30.
16.0	1743.	3665.	1.2	-2.6	5.6	27.
17.0	1795.	3761.	0.0	-2.5	2.0	5.
18.0	1871.	3890.	0.0	-1.7	3.1	34.
19.0	1948.	3990.	0.3	-7.9	3.5	19.
20.0	2024.	4066.	1.0	-7.7	3.9	19.
21.0	2100.	4142.	1.0	-6.1	3.5	20.
22.0	2176.	4218.	0.0	-6.1	3.5	2.

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1958
 DATE 09/29/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
1:0	SFC	2192	8.67	-0.18	0.0	2.56	M	M
2:0	150	2342	8.49	-0.74	-0.37	0.91	M	M
3:0	300	2500	7.75	-1.03	-2.02	0.53	M	M
3:3	458	2542	6.72	-0.27	-1.85	1.08	M	M
6:8	500	3000	6.45	-0.40	-2.43	0.50	M	M
12:8	958	4000	3.05	-3.43	-1.71	1.22	M	M
19:1	1958	5000	-1.28	-4.33	-3.68	-0.95	M	M
	2958		-8.29	-7.02				

COL CB TRACT ELEV 2042 METERS SOUNDING ID 1958
 DATE 09/29/76 TIME 07:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
THE WIND DATA ARE MISSING						

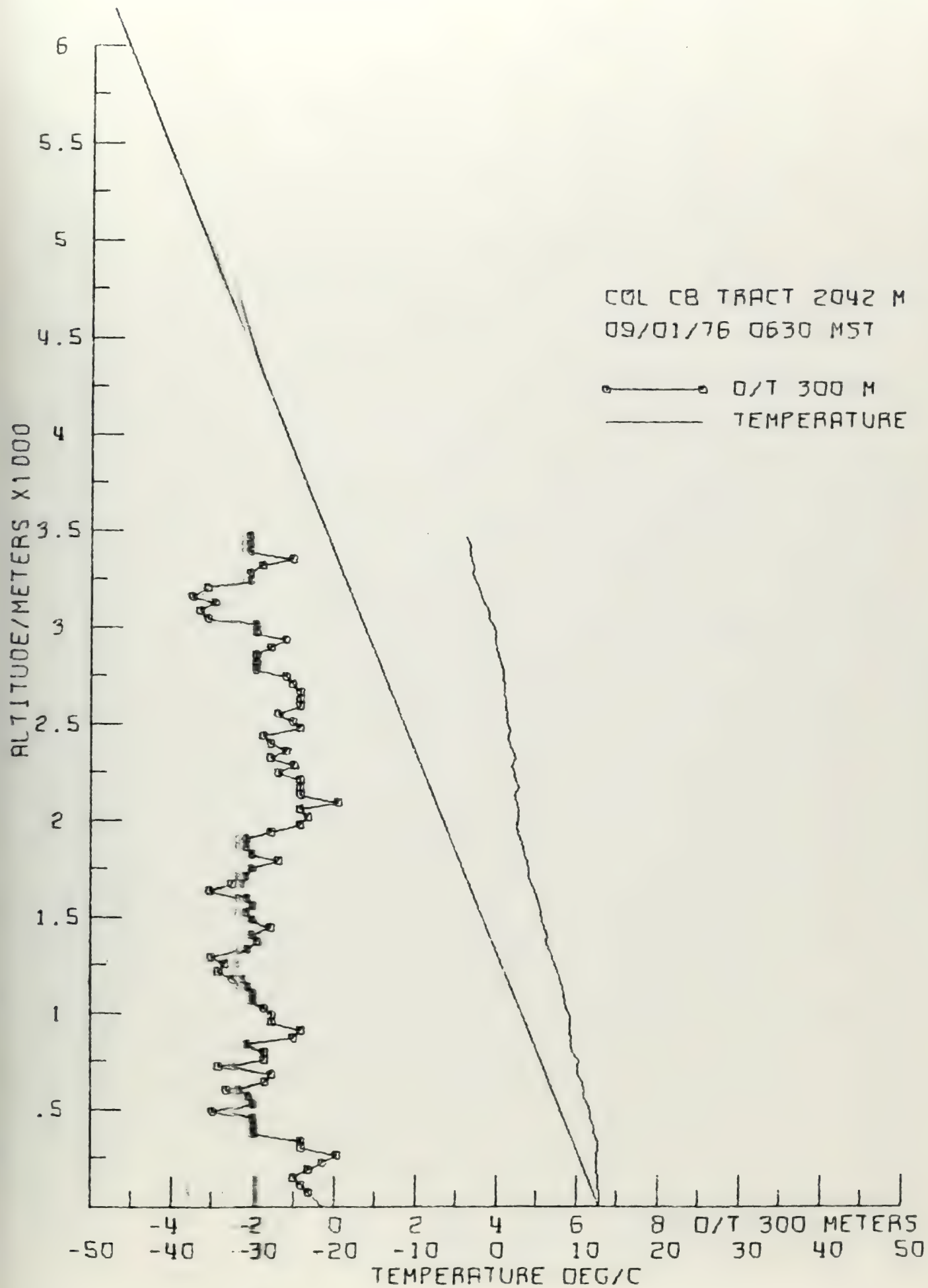
COL CH TRACT ELEV 2042 METERS SOUNDING ID 1947
 DATE 09/29/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

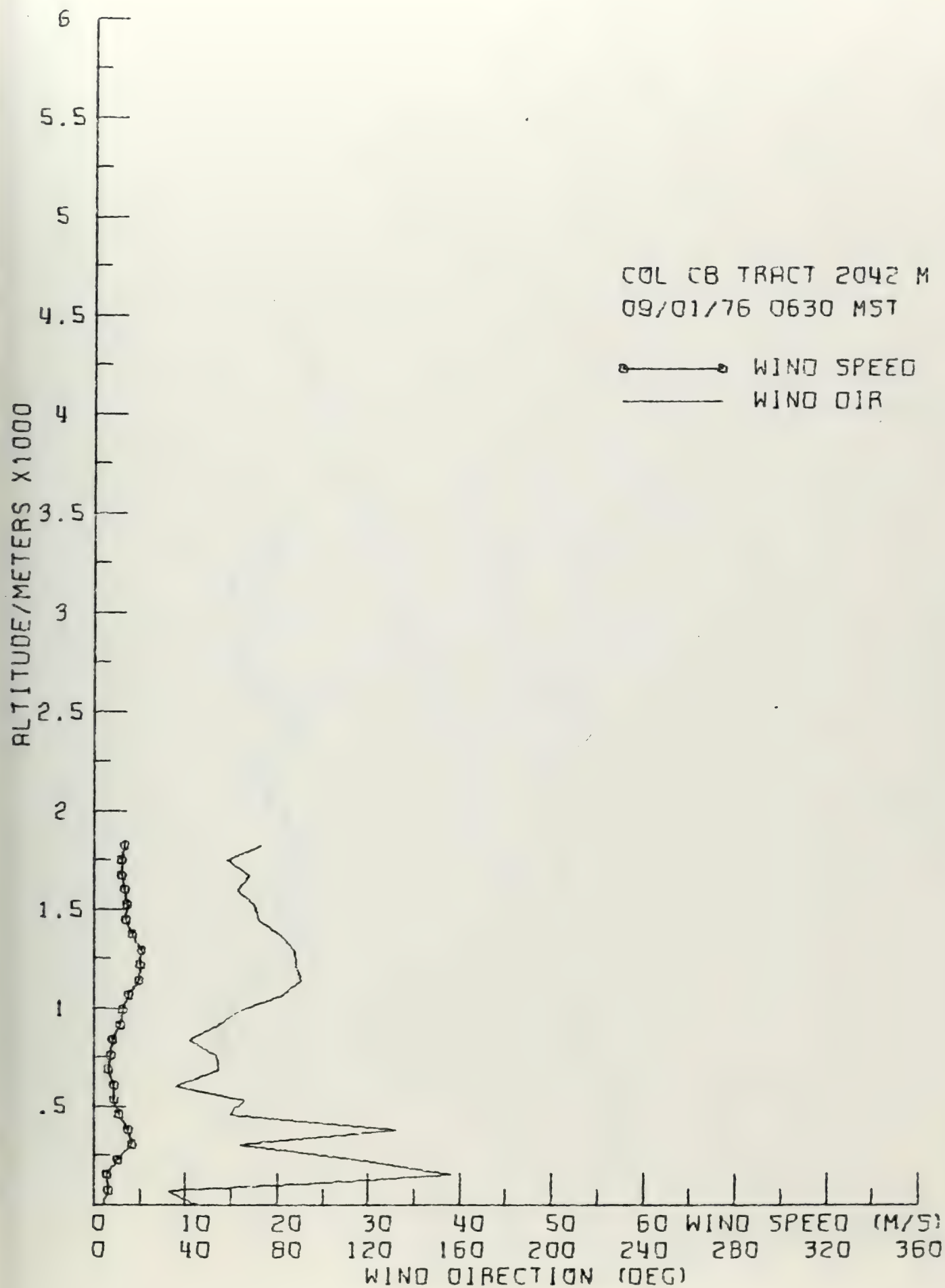
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
0:9	SFC	2192	14.20	-1.60	0.0	-2.50	M 2.2	M 338.
1:5	150	2342	12.59	-2.03	-5.42	-2.88	M 2.7	M 332.
2:0	300	2500.	10.60	-2.06	-5.12	-2.19	M 4.3	M 324.
2:1	450	2542.	8.46	-1.15	-5.51	-2.58	M 4.2	M 323.
4:4	500	3000.	4.54	-3.90	-3.90	-0.98	M 1.8	M 257.
10:8	958.	4000.	-1.57	-6.13	-1.52	-1.41	M 1.4	M 276.
17:3	1958.	5000.	-8.09	-6.52	-3.29	-0.36		

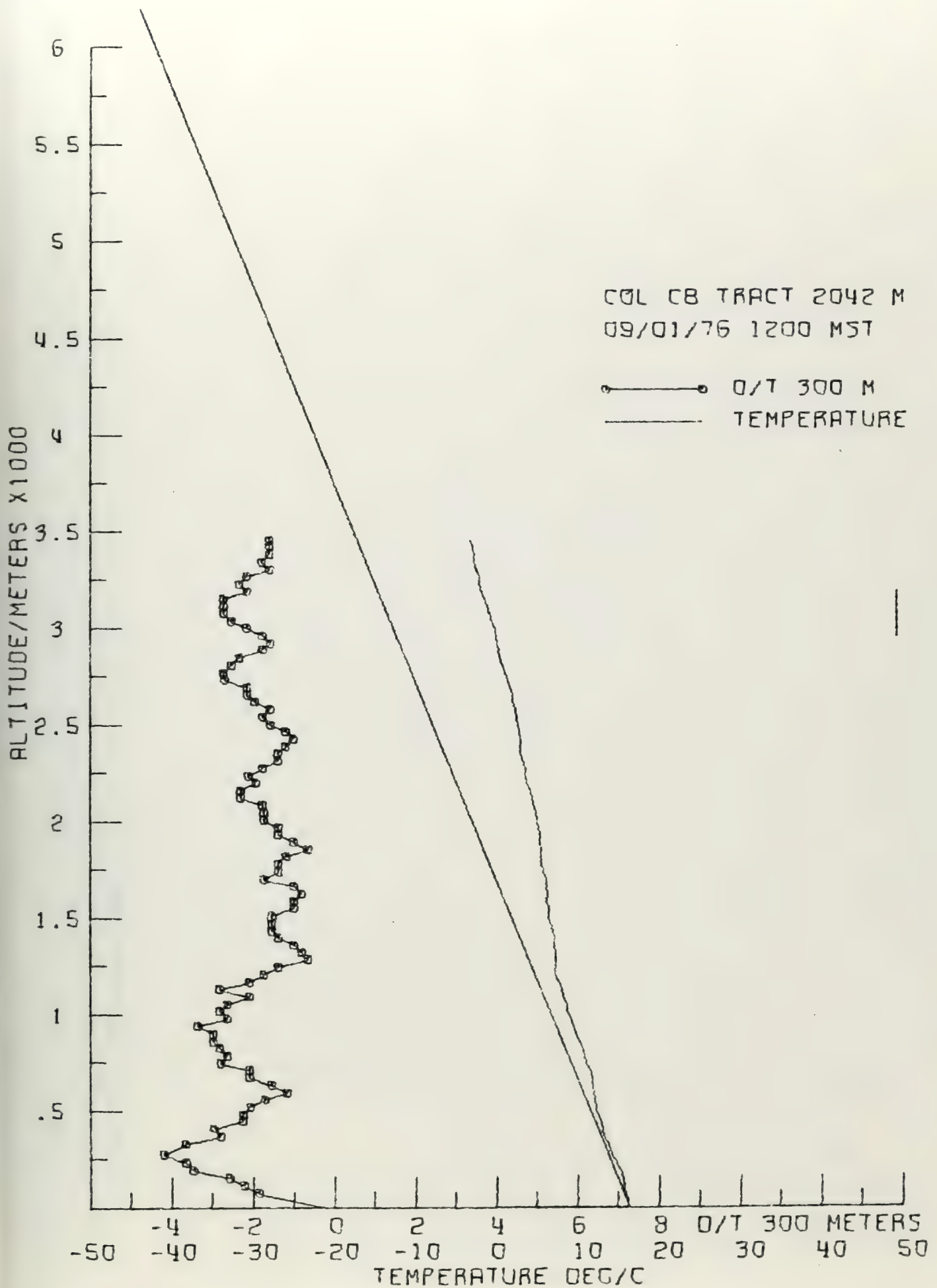
COL CB TRACT ELEV 2042 METERS SOUNDING ID 1947
 DATE 09/29/76 TIME 13:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

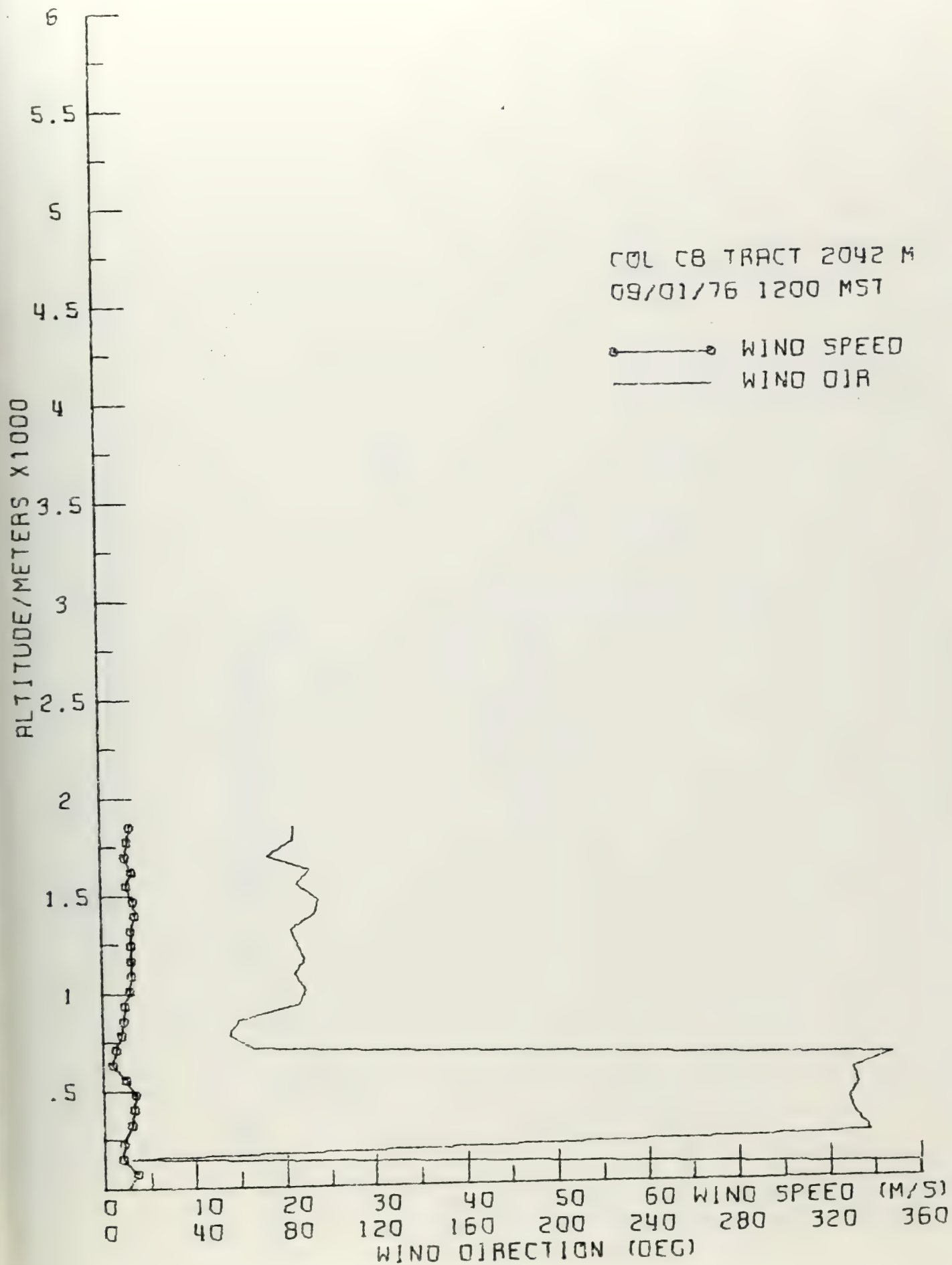
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0:5	76.	2118.	0.8	0.8	0	339.
1:5	177.	2219.	0.8	1.1	2	331.
2:2	312.	2354.	1.5	3.5	3	334.
3:0	463.	2505.	2.2	5.9	3	324.
3:5	597.	2751.	2.9	7.5	3	318.
4:0	709.	2829.	1.7	1.1	2	302.
4:5	870.	2912.	2.0	0.8	1	291.
5:0	978.	3020.	1.2	0.6	1	250.
5:5	1066.	3108.	1.2	0.5	1	301.
6:7	1154.	3196.	1.2	0.5	1	308.
6:7	1230.	3272.	1.2	0.7	3	308.
6:7	1306.	3348.	1.2	0.7	3	303.
7:7	1383.	3425.	1.2	0.6	3	306.
7:8	1459.	3501.	1.1	0.8	2	299.
8:9	1535.	3577.	1.1	0.9	1	304.
8:9	1611.	3653.	1.1	0.9	1	309.
9:9	1687.	3729.	1.1	1.1	2	327.
9:9	1764.	3806.	1.1	1.3	2	319.
10:5	1840.	3882.	1.2	1.5	2	319.
10:5	1916.	3958.	0.0	1.0	2	325.
11:1	1993.	4035.	0.0	1.0	2	325.
11:2	2069.	4111.	0.0	1.0	2	325.
12:5	2145.	4187.	0.0	1.0	2	325.
12:5	2221.	4263.	0.0	1.0	2	325.
13:5	2297.	4339.	0.0	1.0	2	325.
13:5	2374.	4416.	0.0	1.0	2	325.
14:5	2450.	4492.	0.0	1.0	2	325.

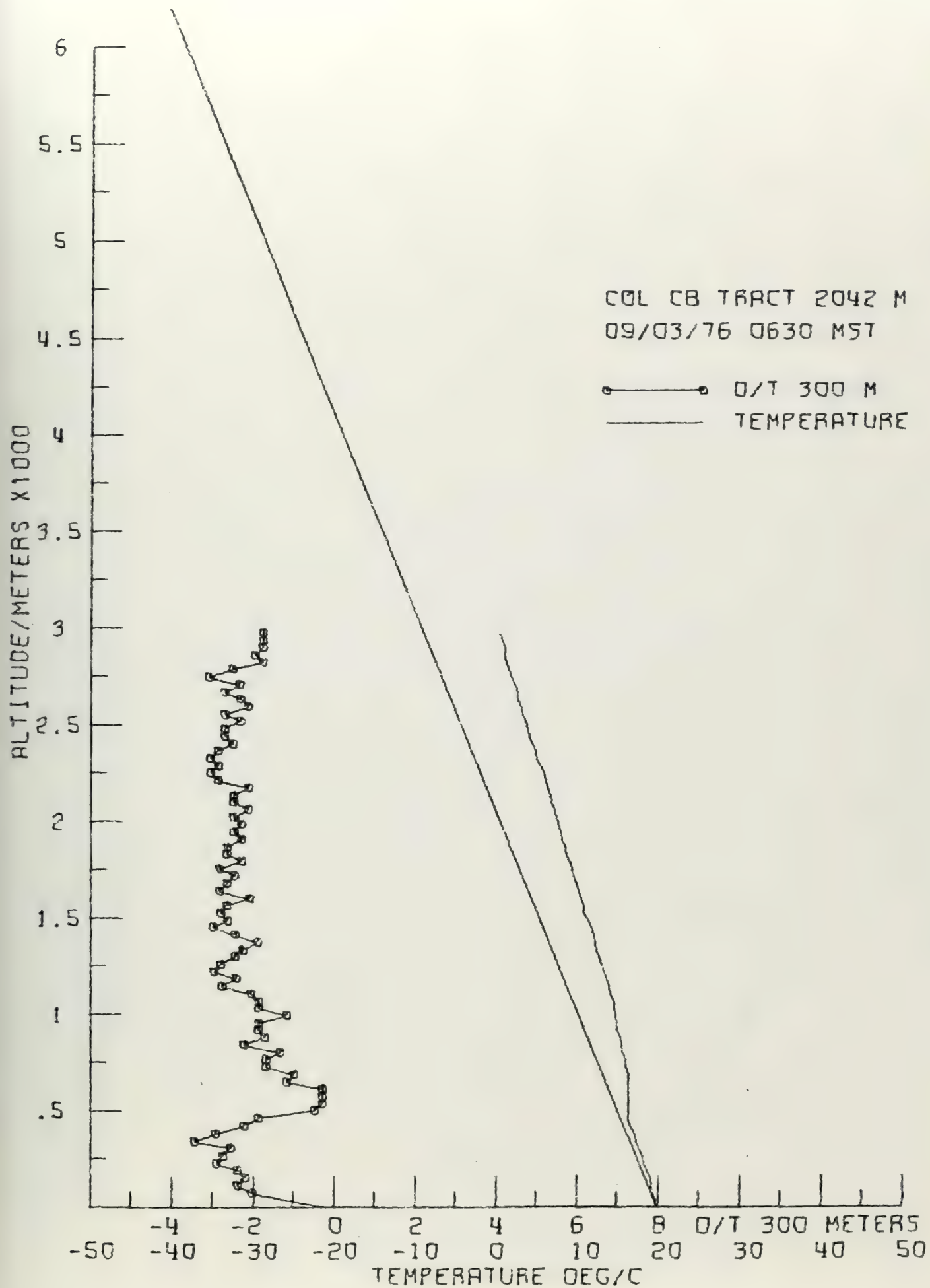
THE WIND DATA ARE MISSING

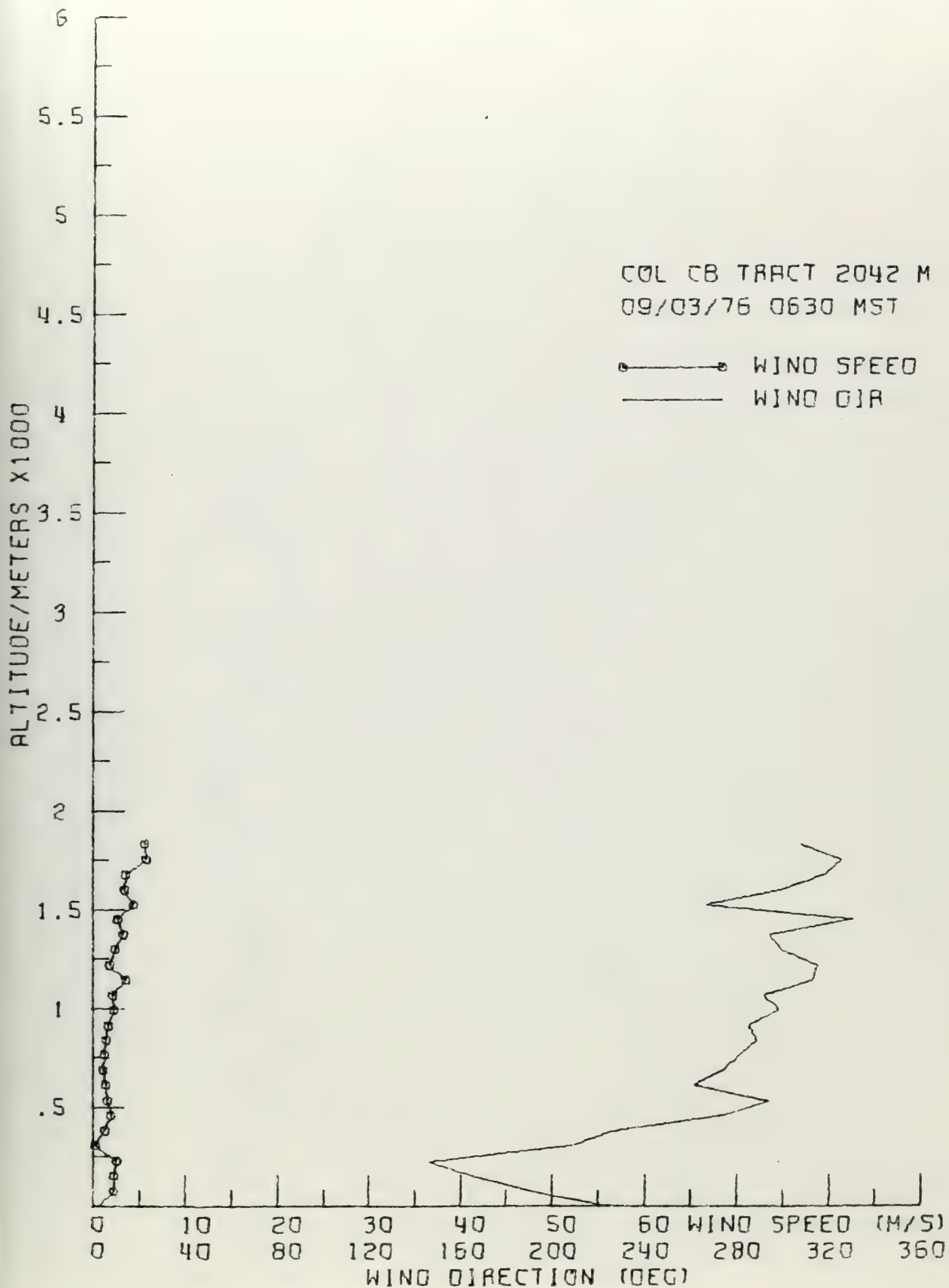


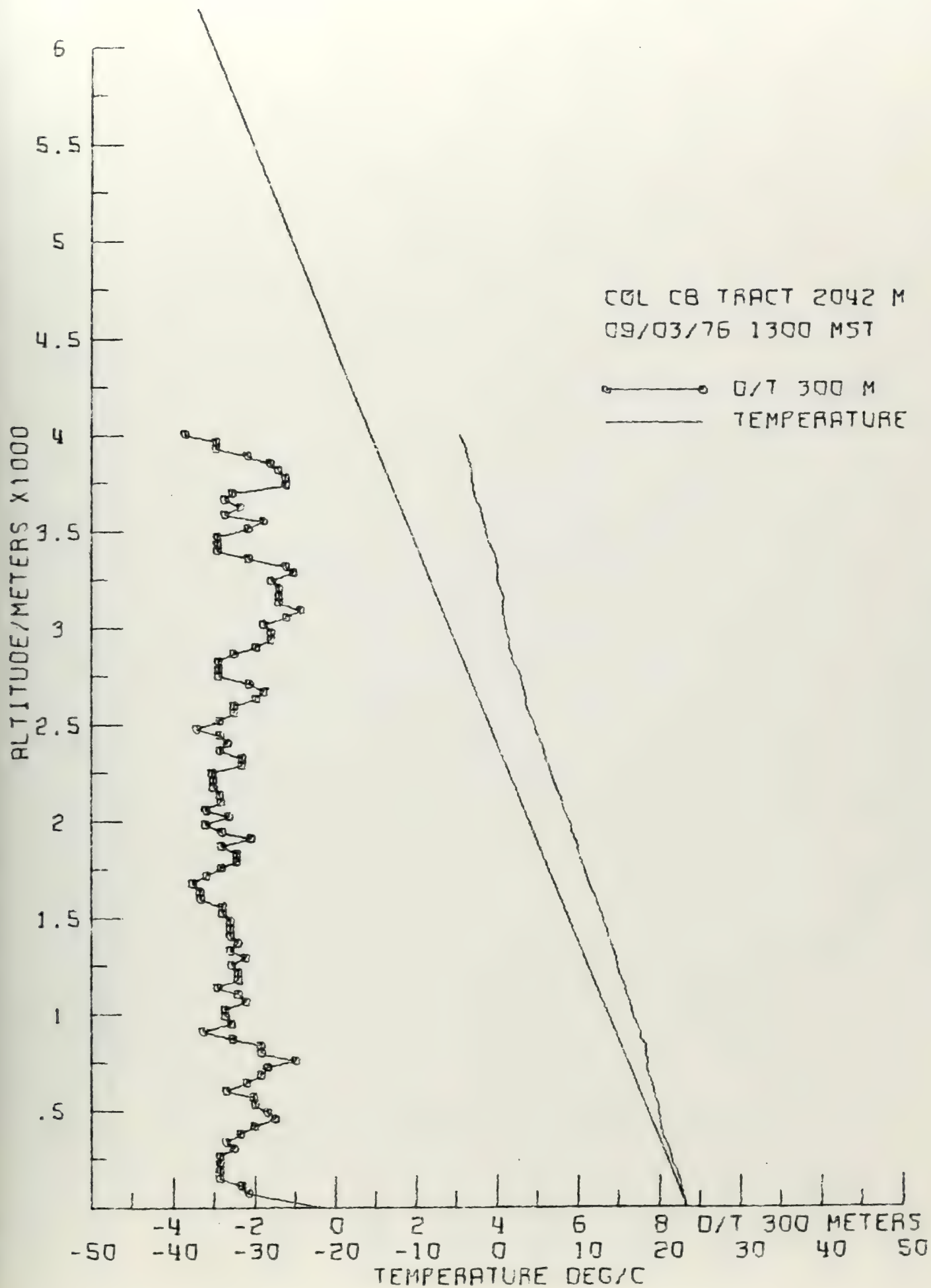


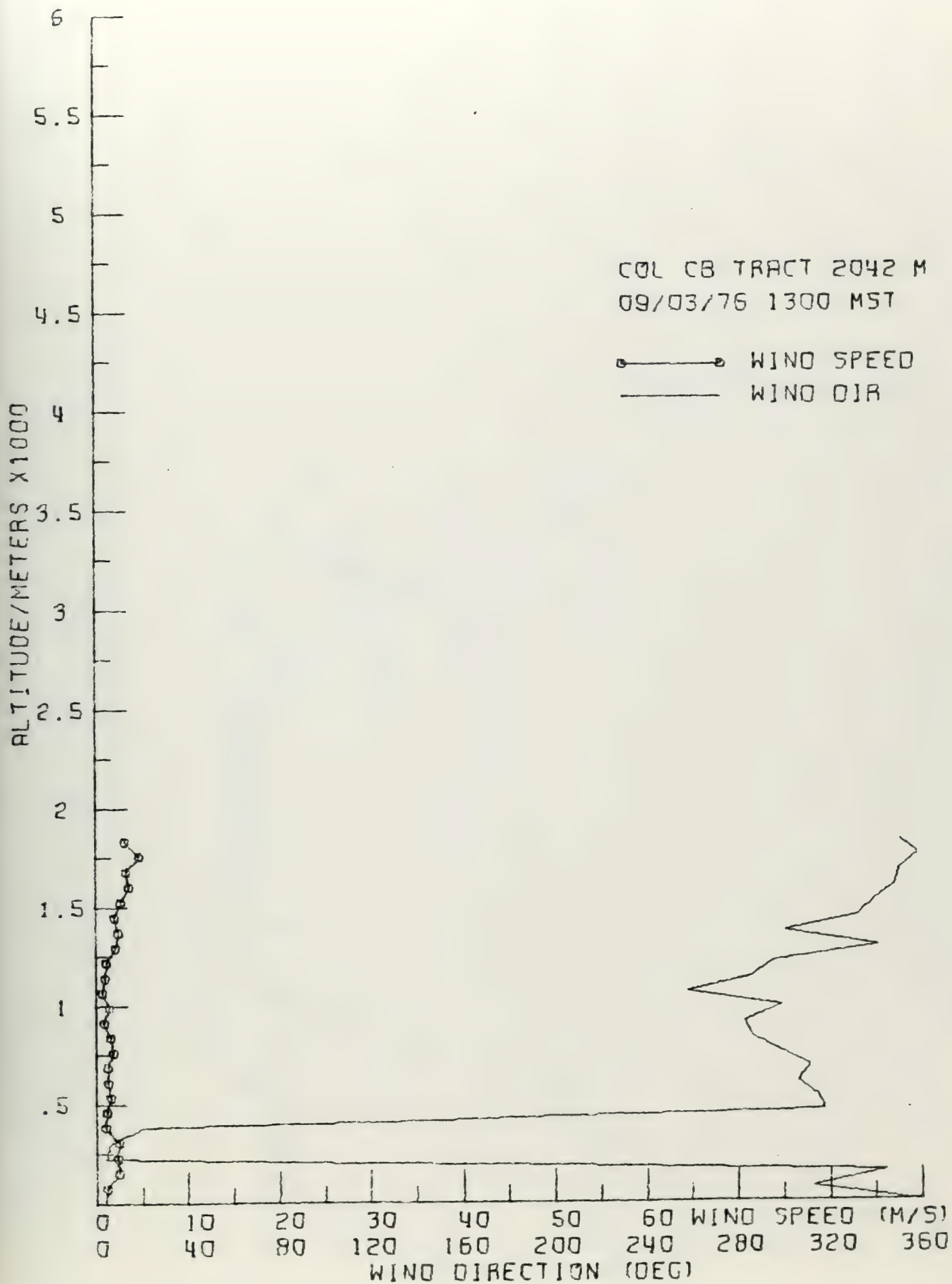


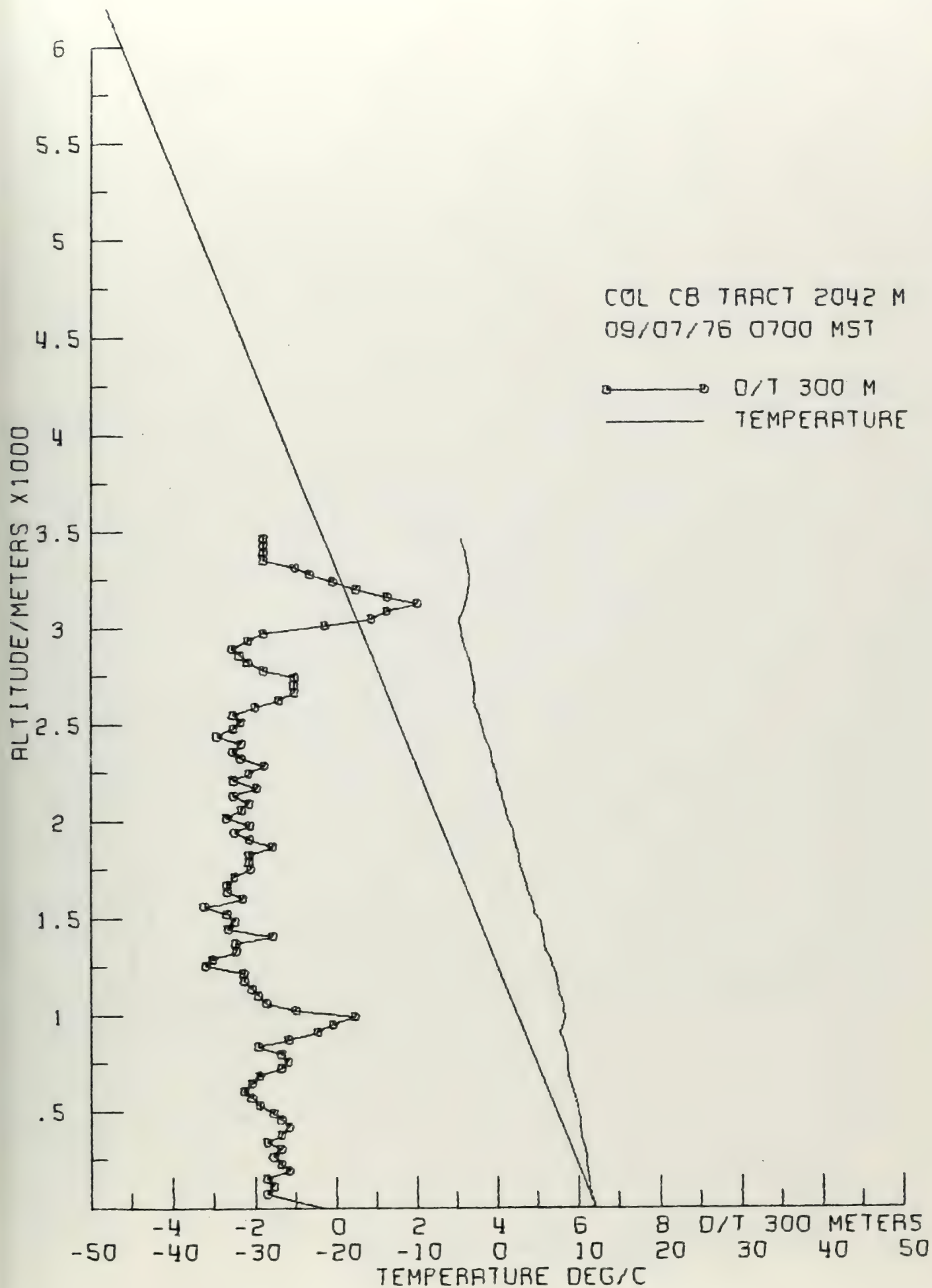


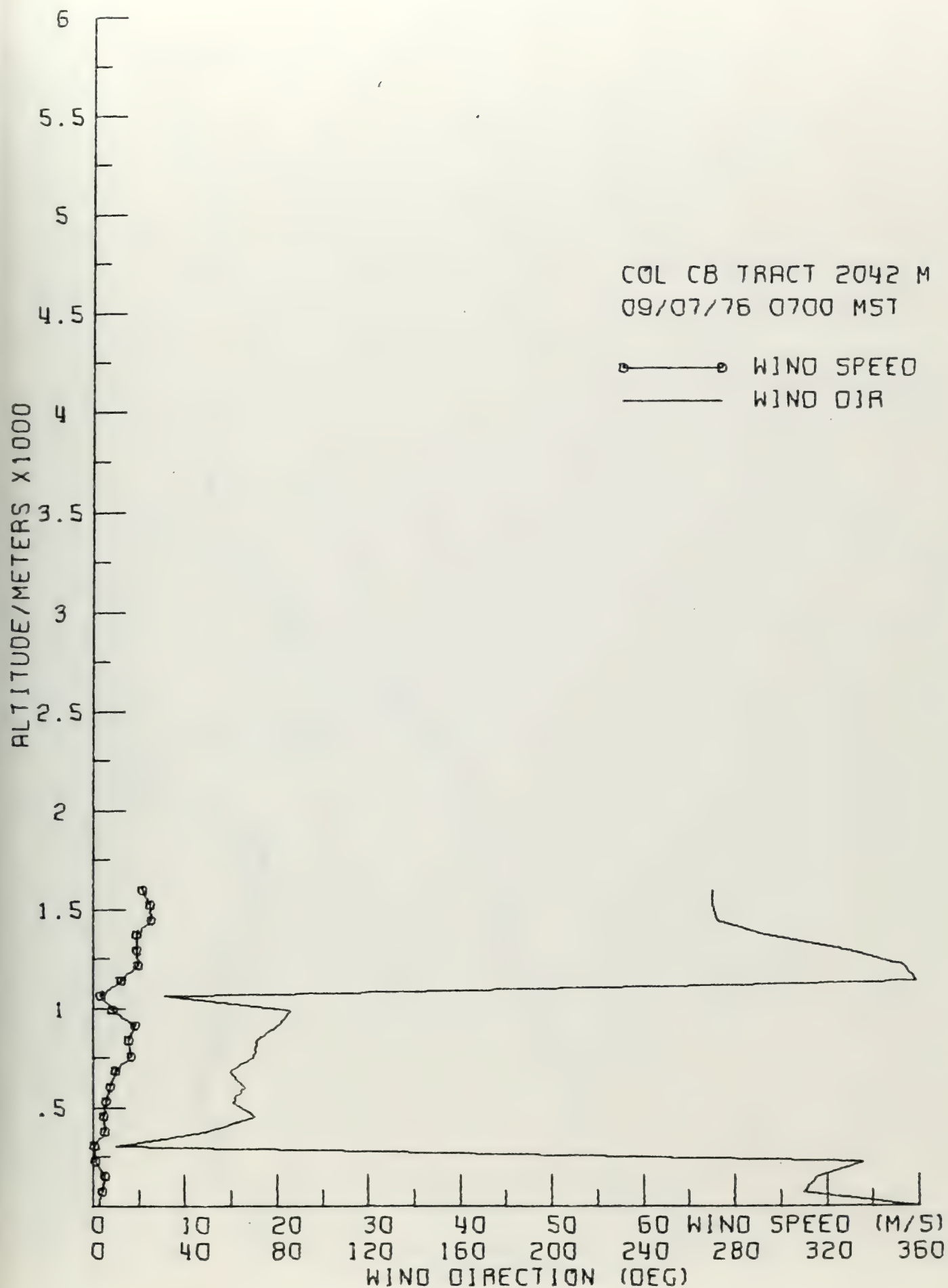


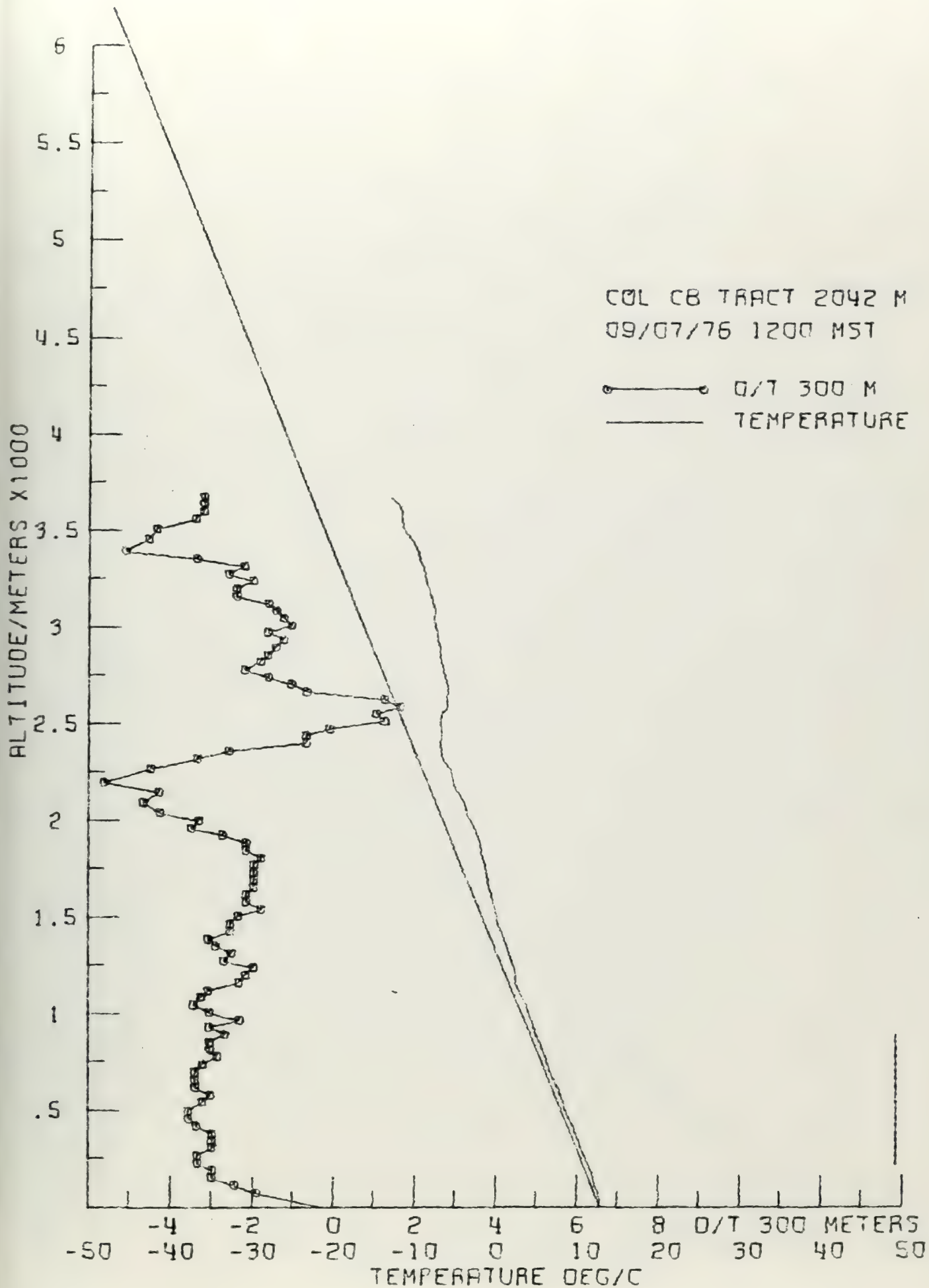




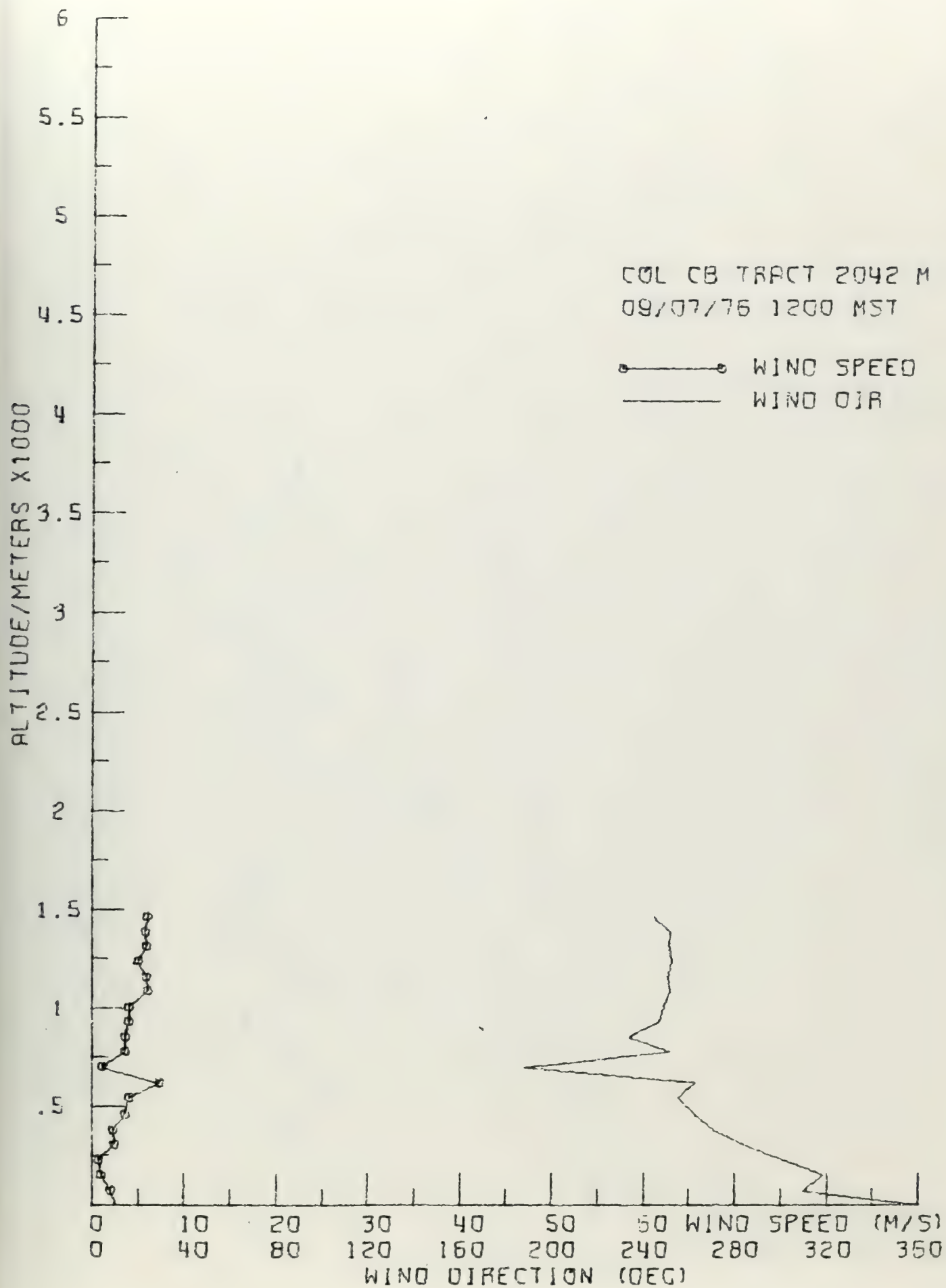


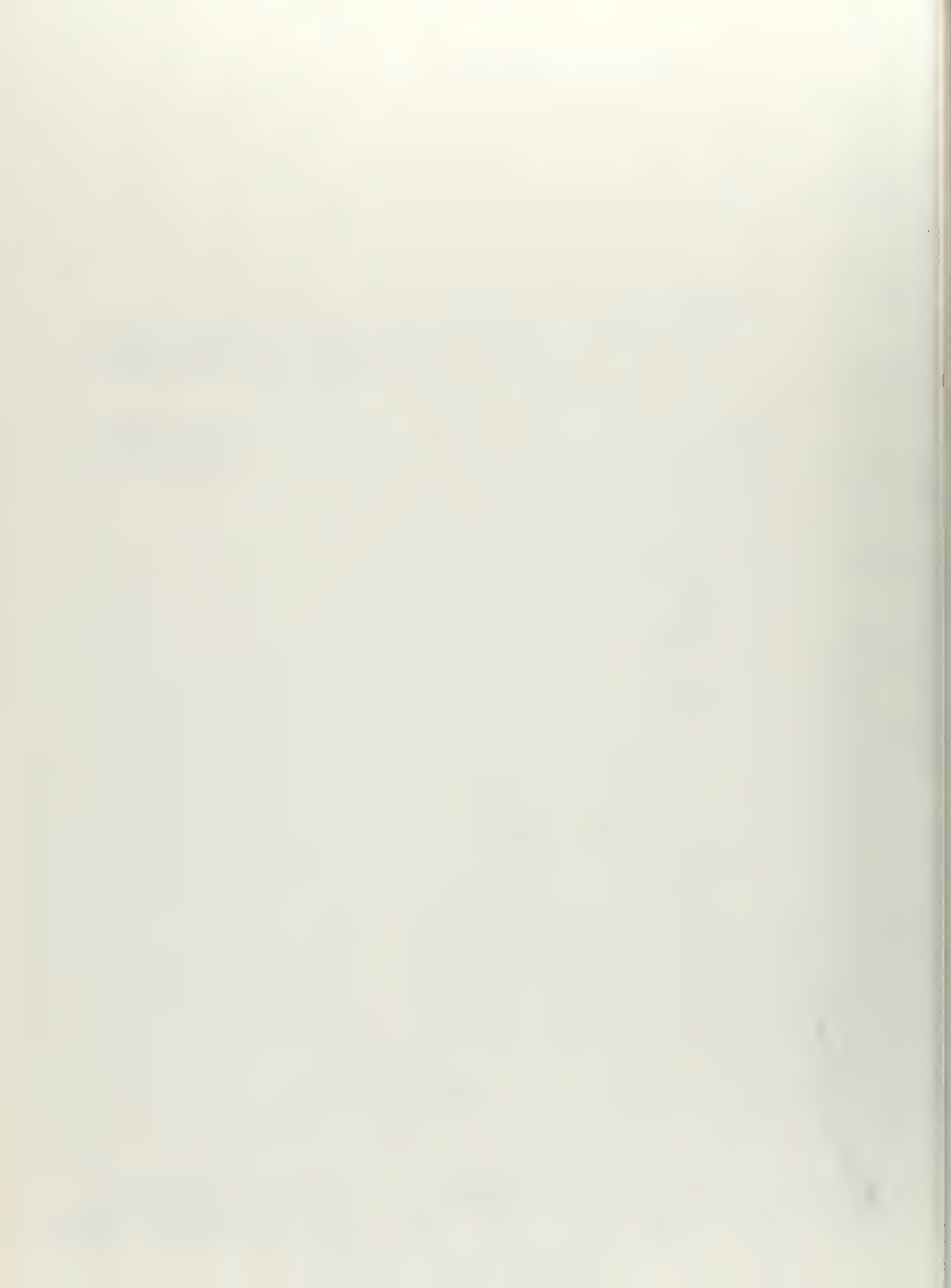


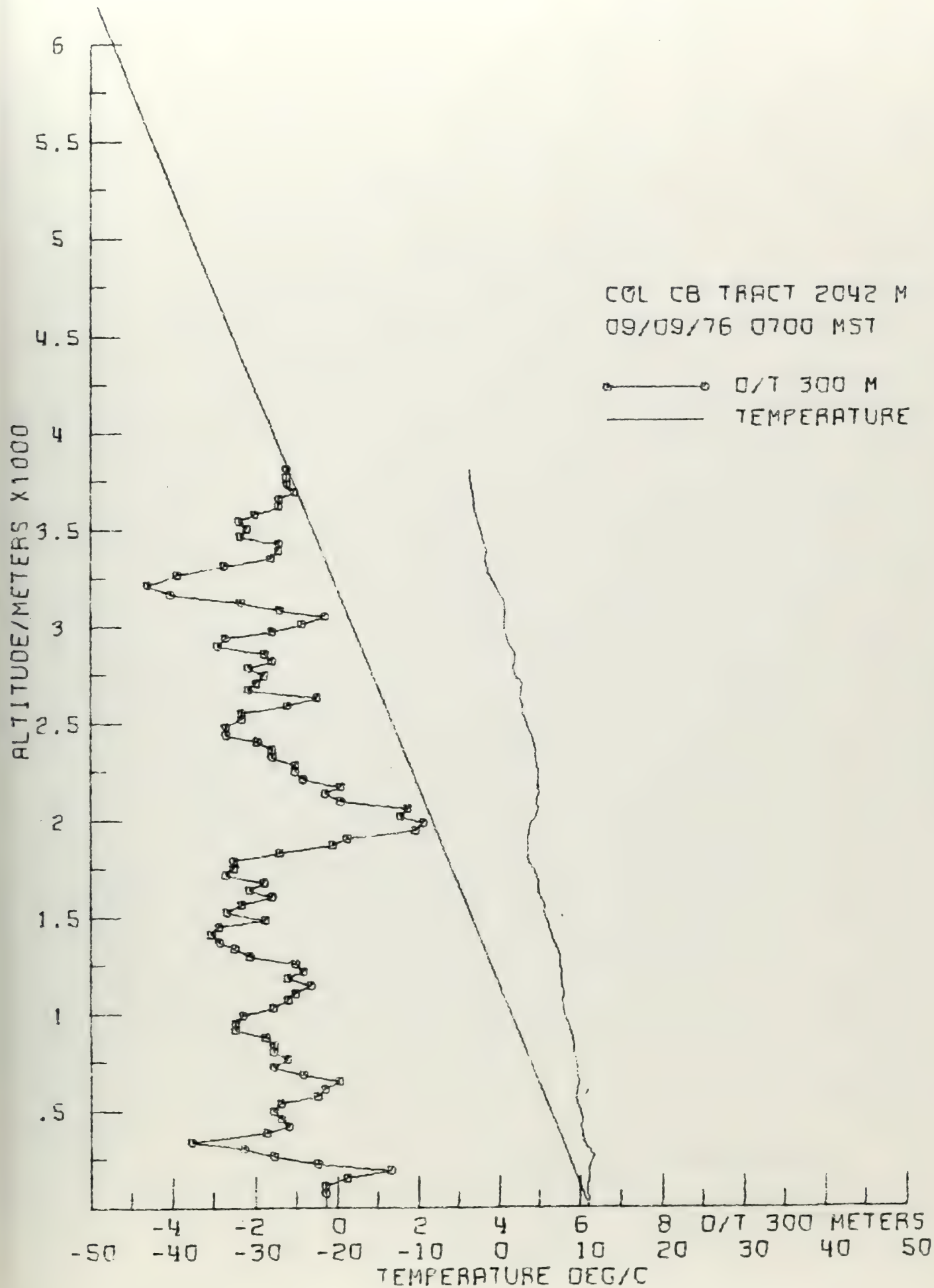


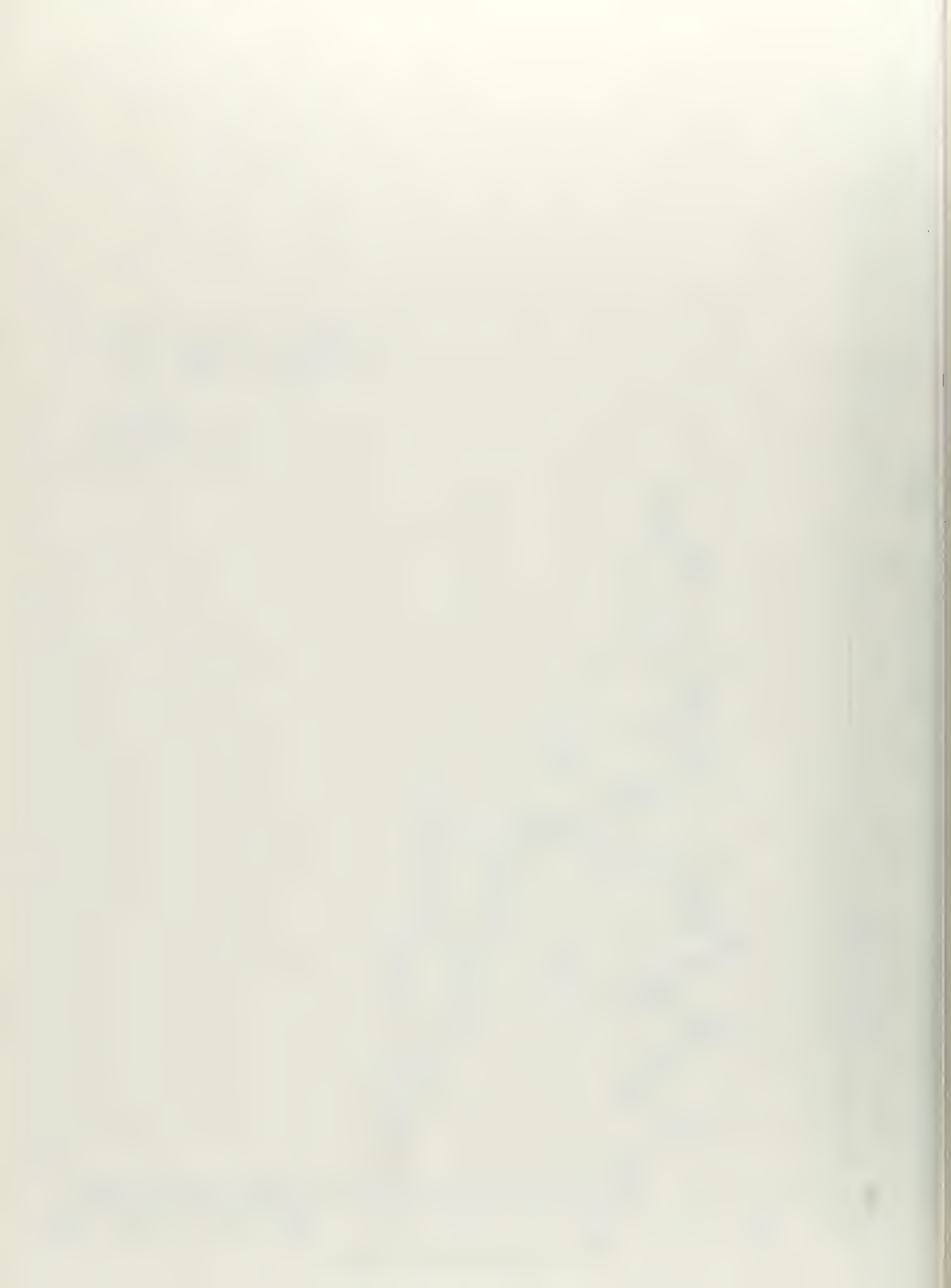


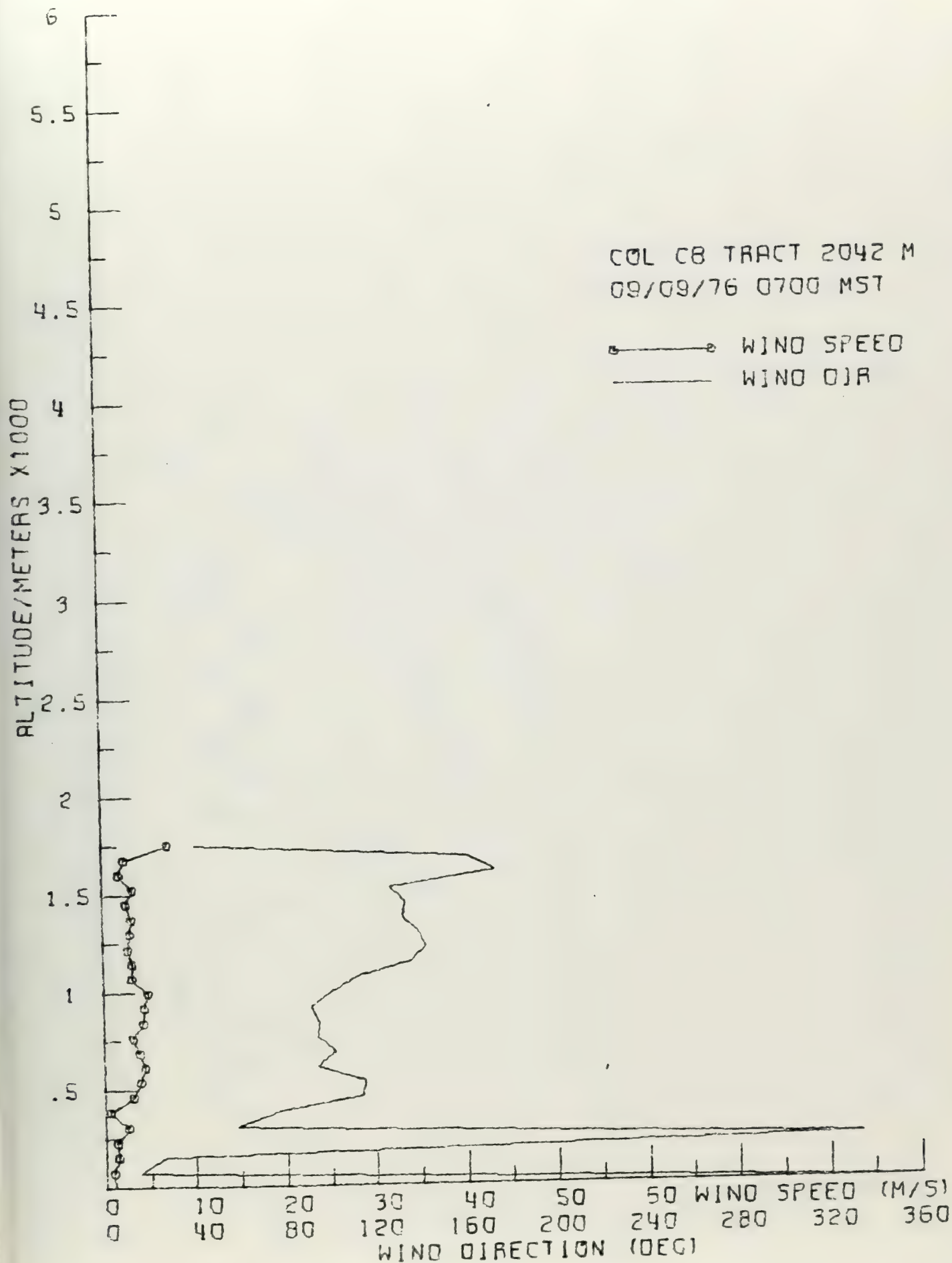












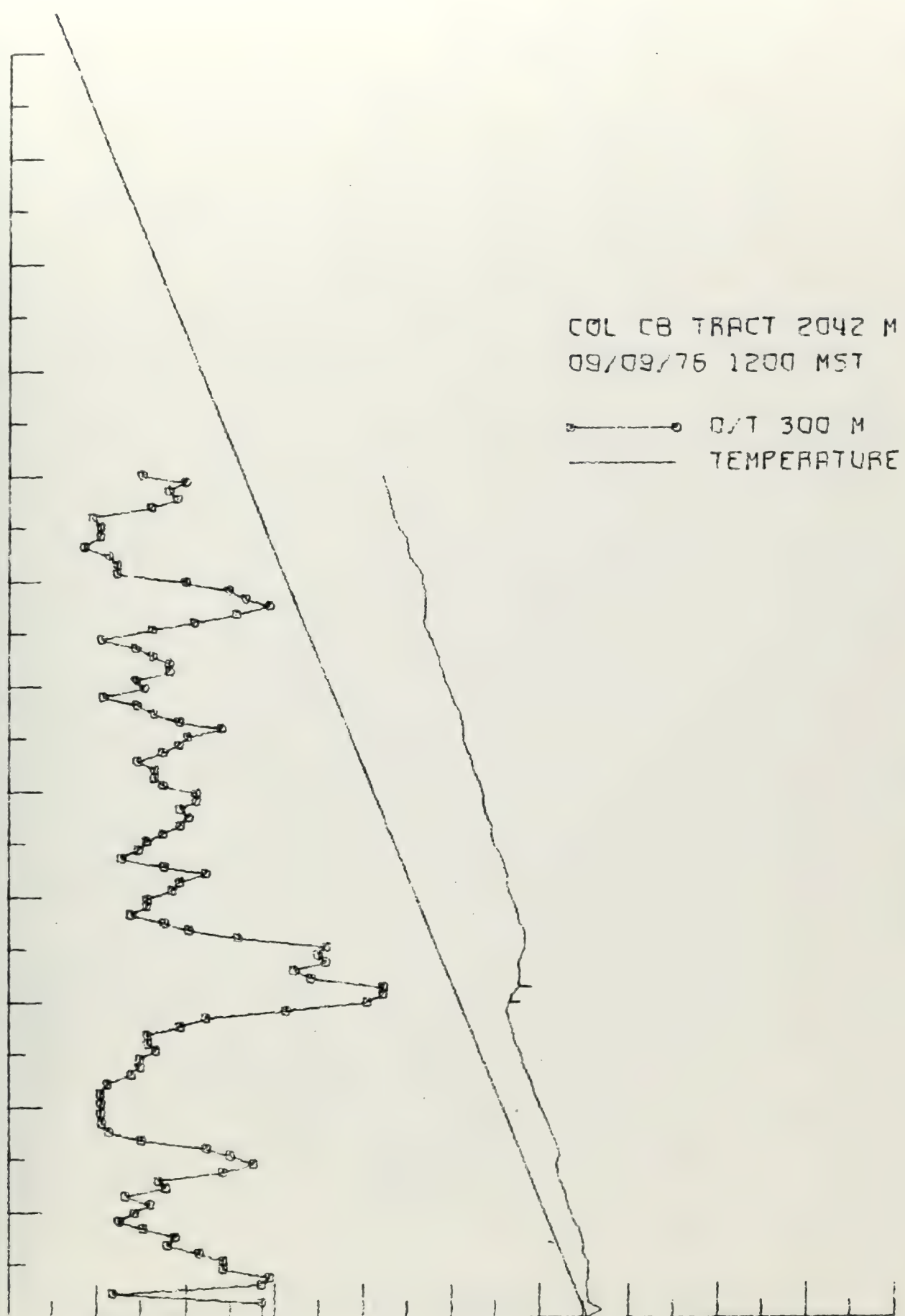
ALTITUDE/METERS X1000

6
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.5

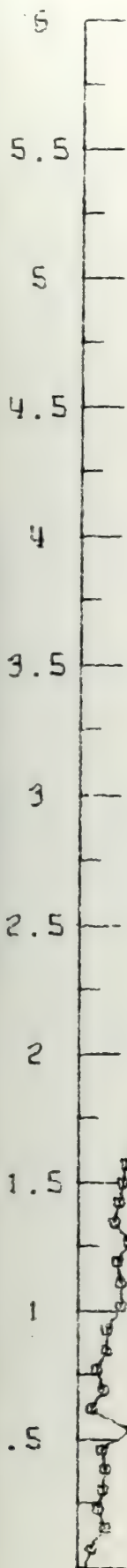
COL CB TRACT 2042 M
09/09/76 1200 MST

—○— D/T 300 M
— TEMPERATURE

-50 -40 -30 -20 -10 0 10 20 30 40 50
D/T 300 METERS
TEMPERATURE DEG/C

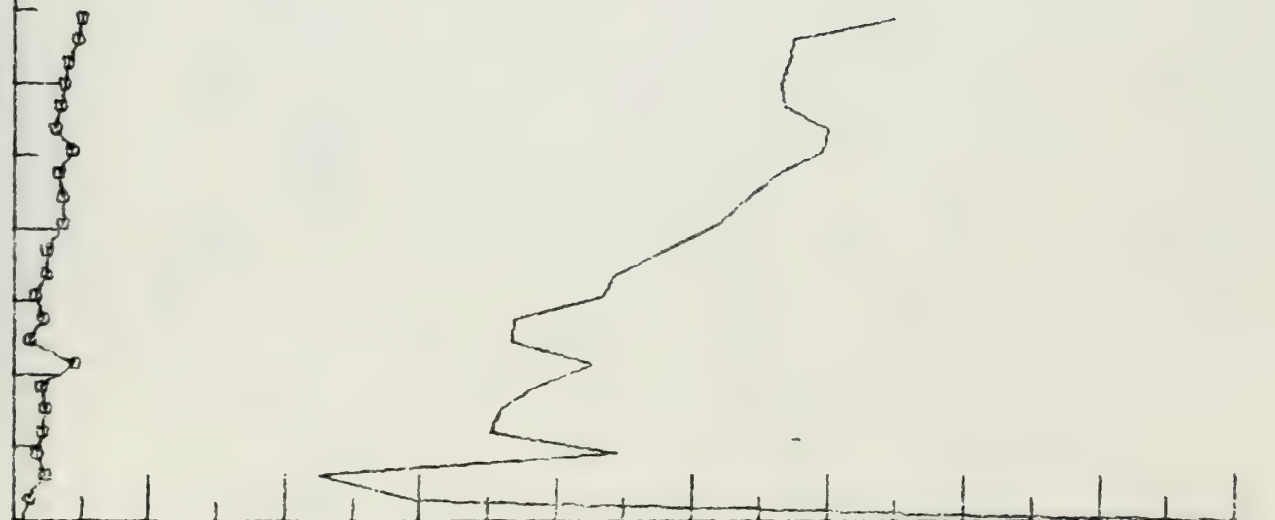
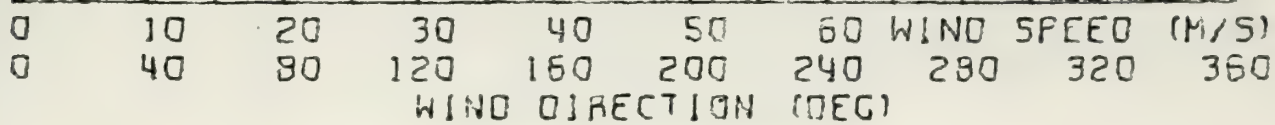


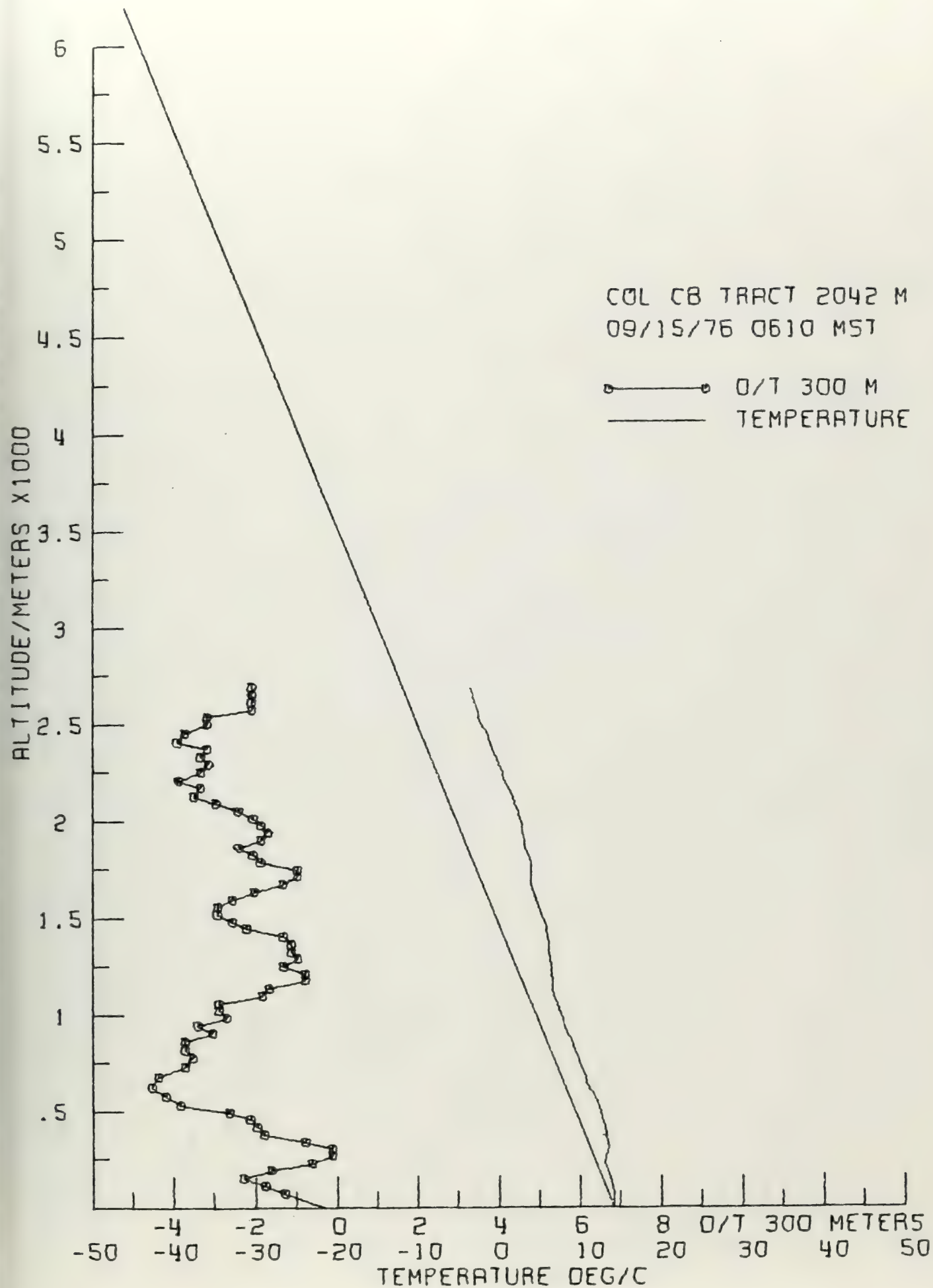
ALTITUDE/METERS X1000

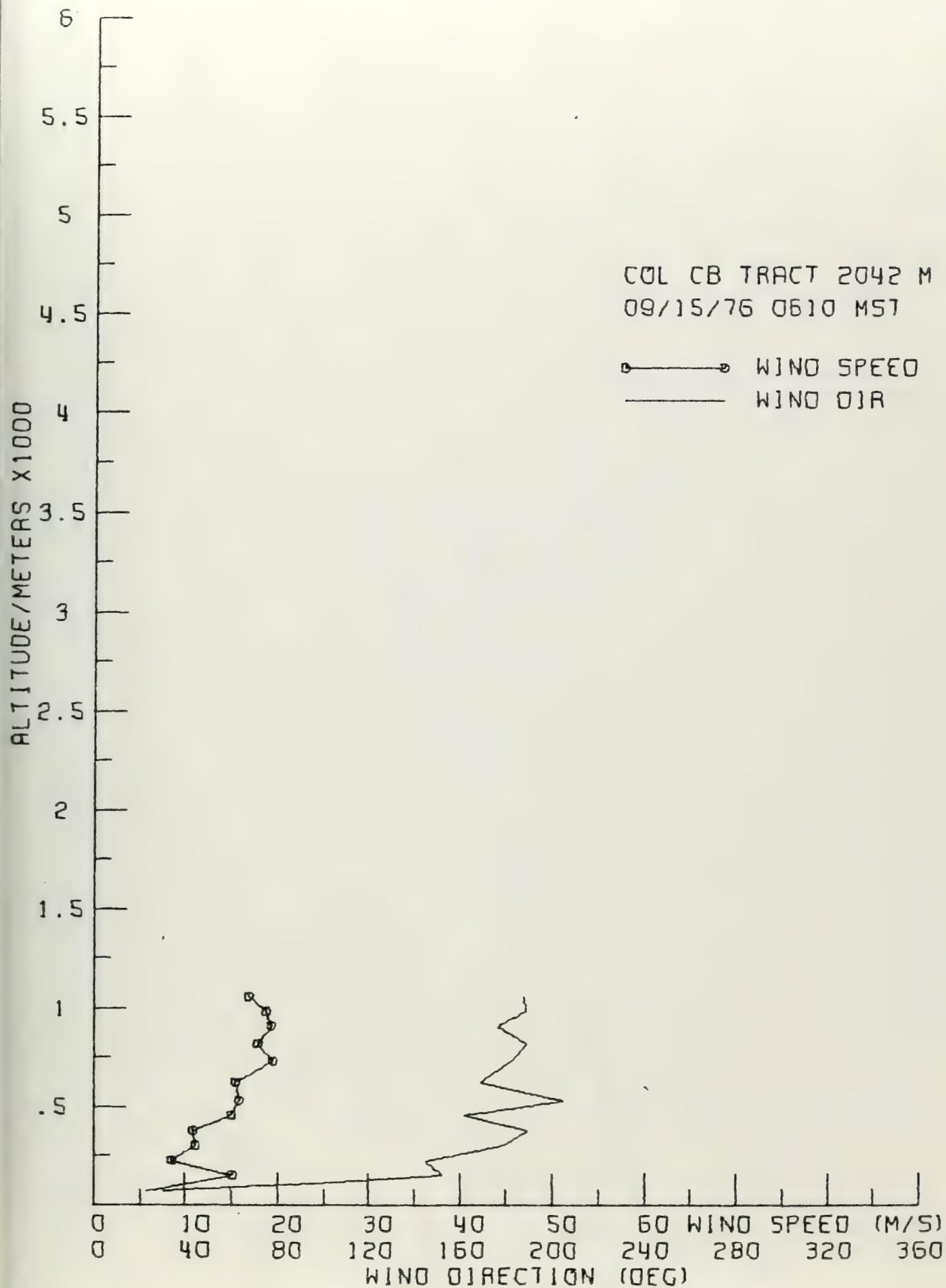


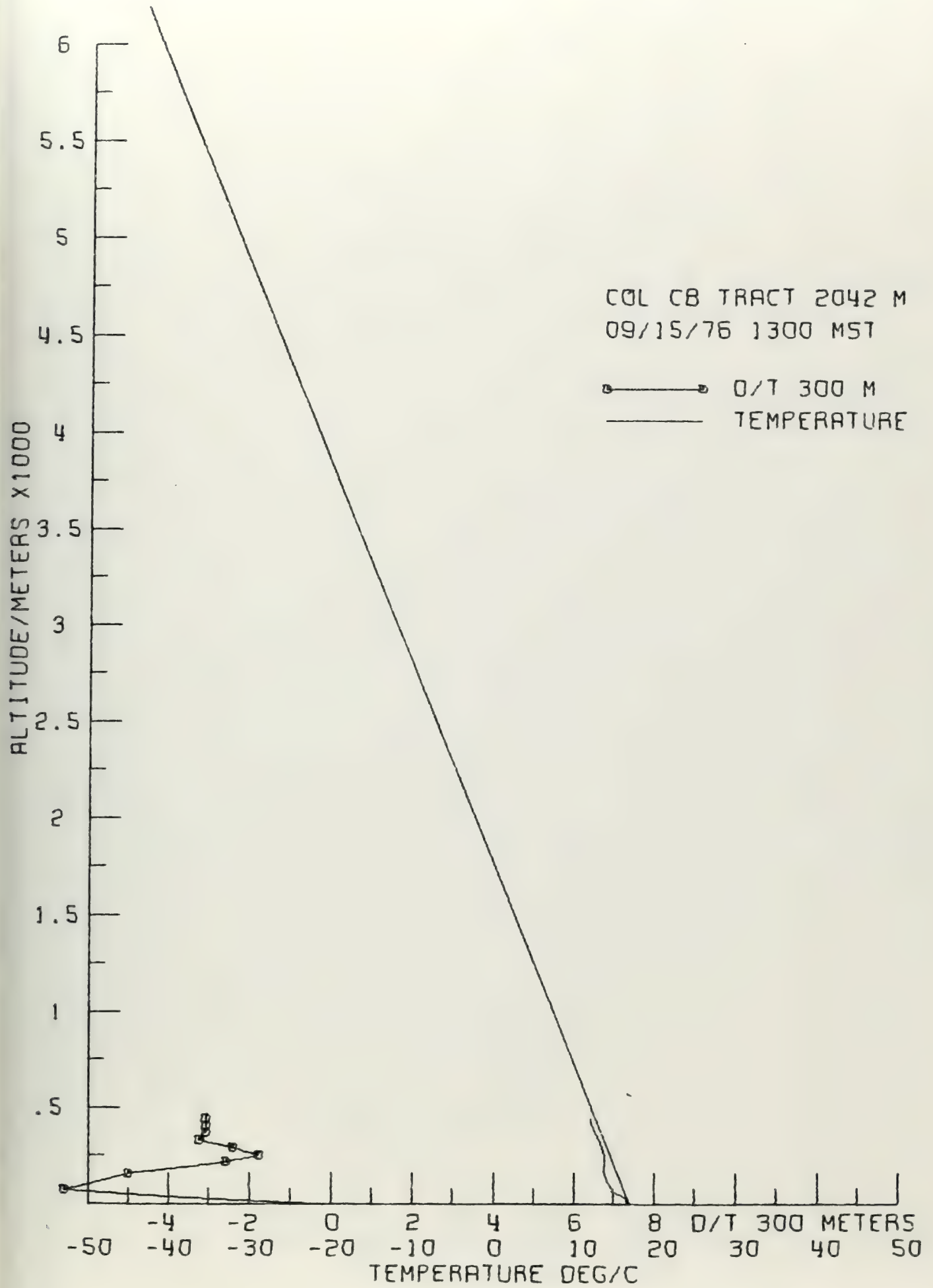
COL CB TRACT 2042 M
09/09/76 1200 MST

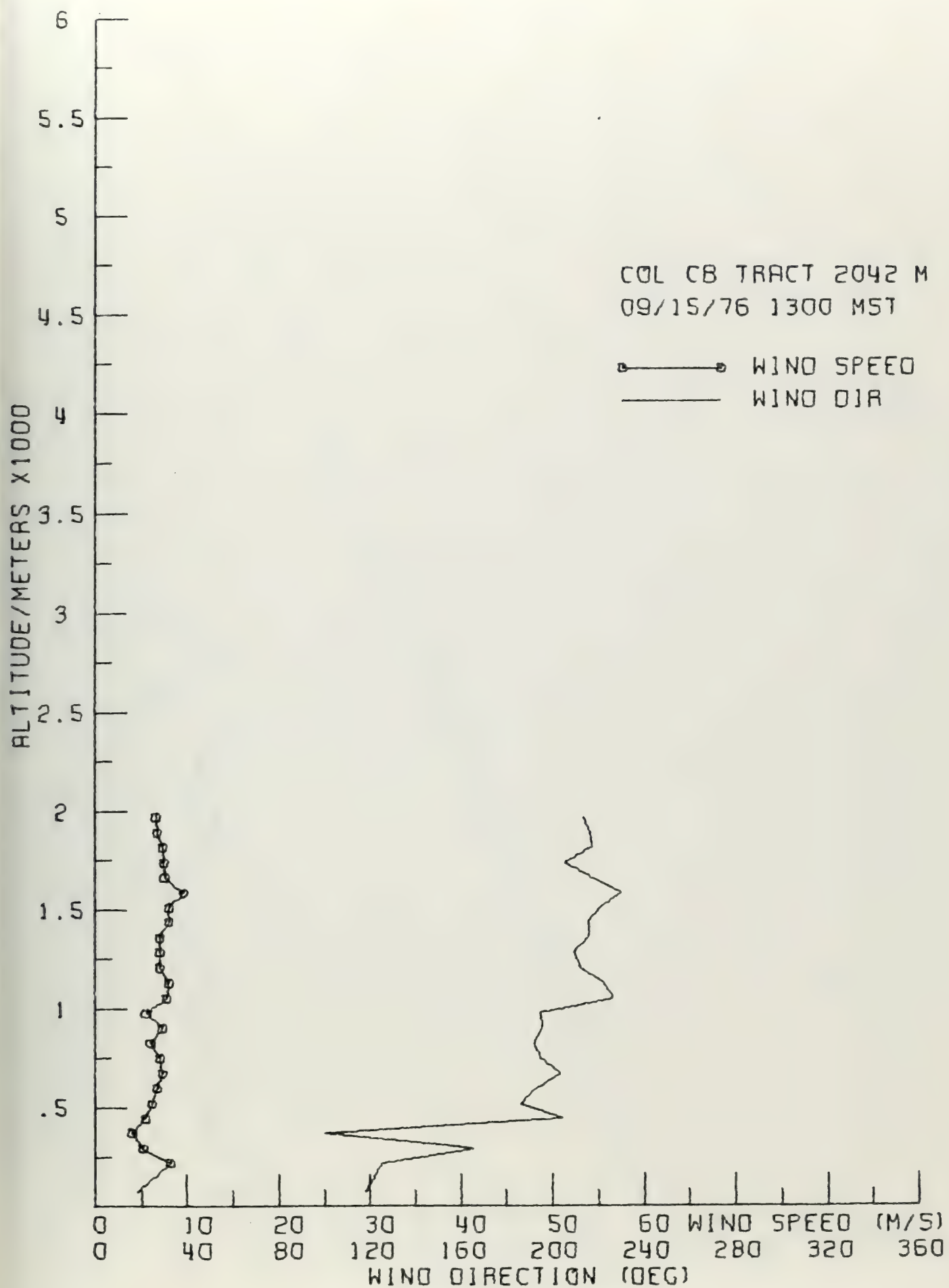
WIND SPEED
WIND DIR

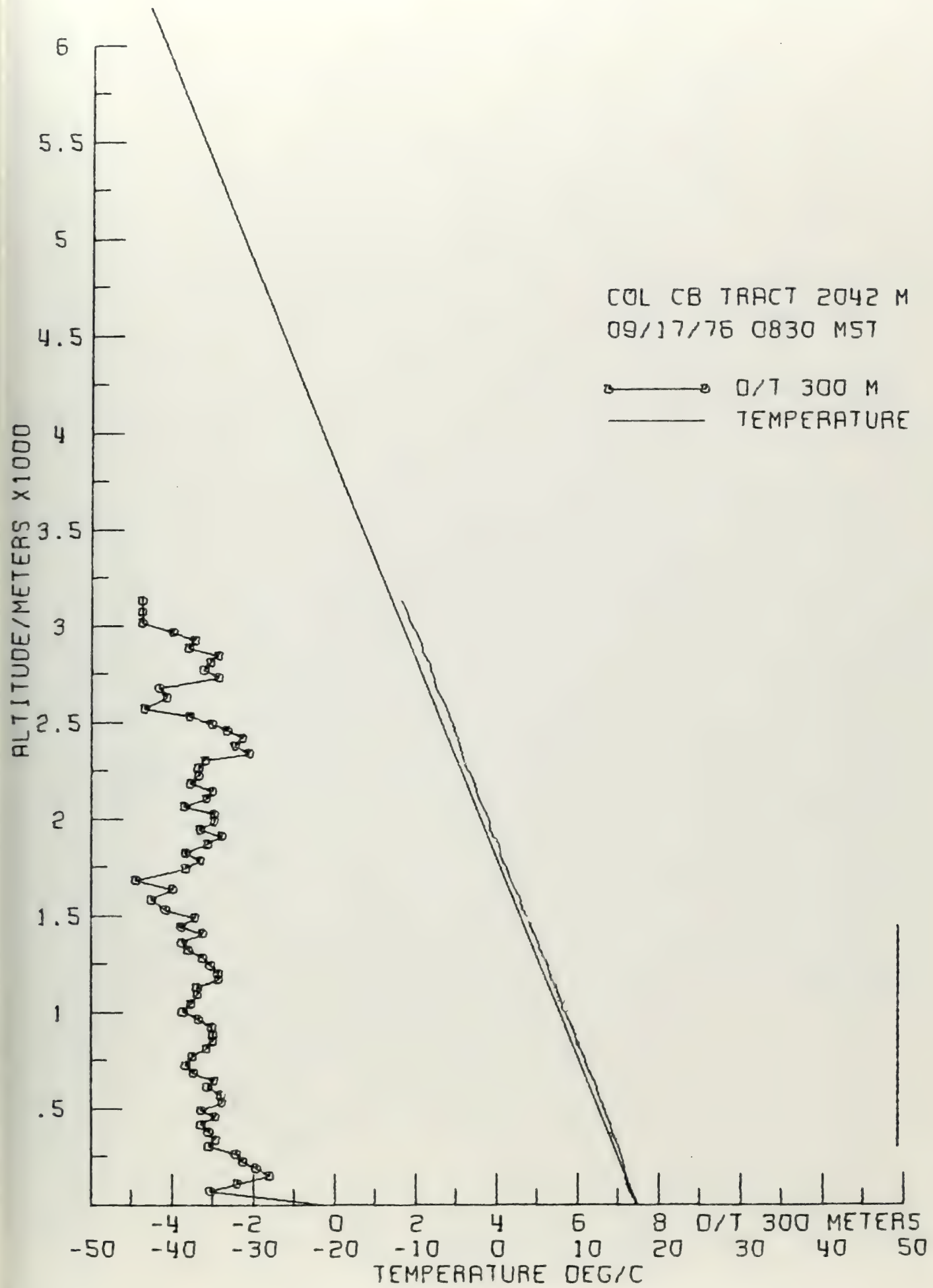


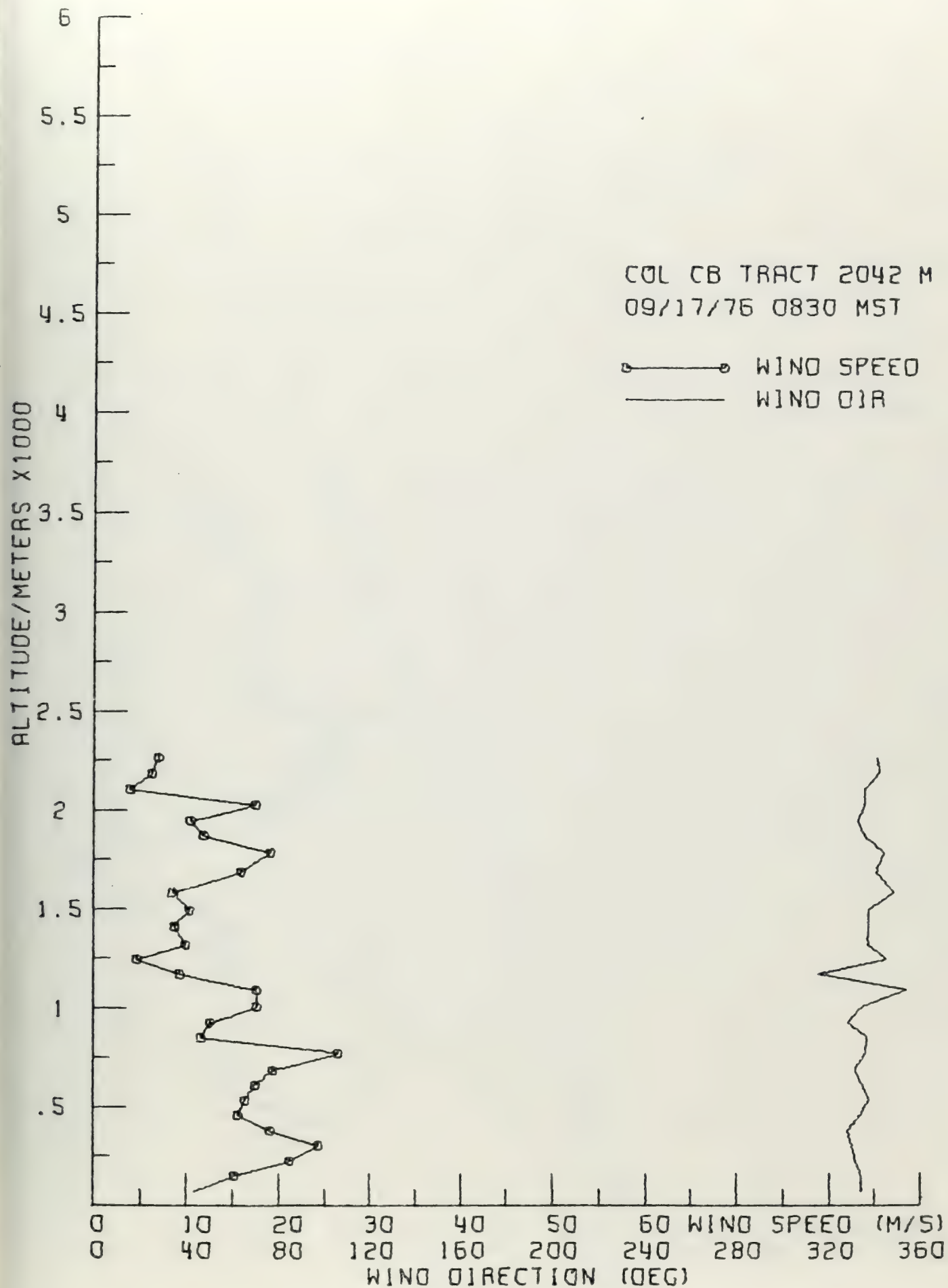


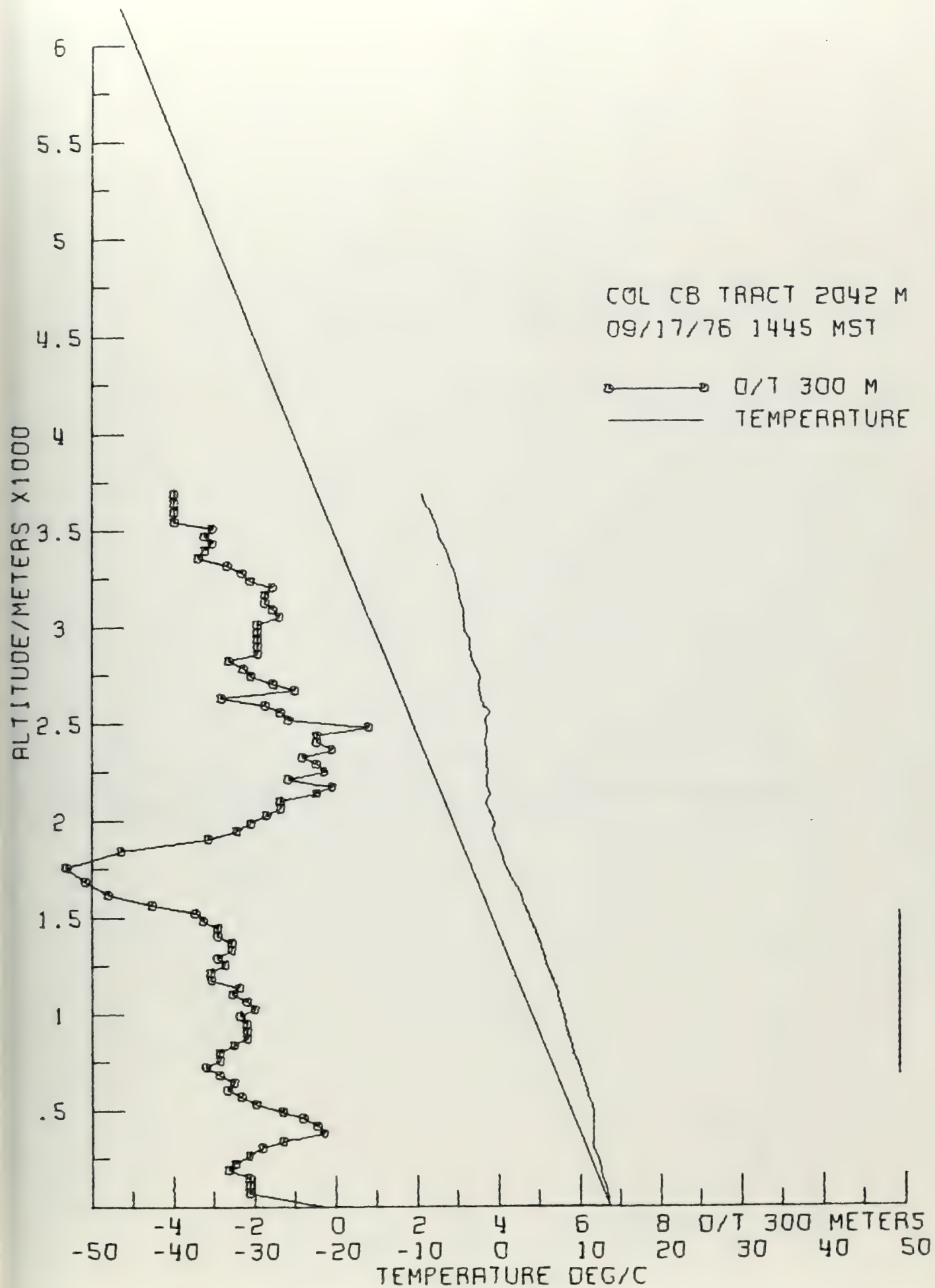


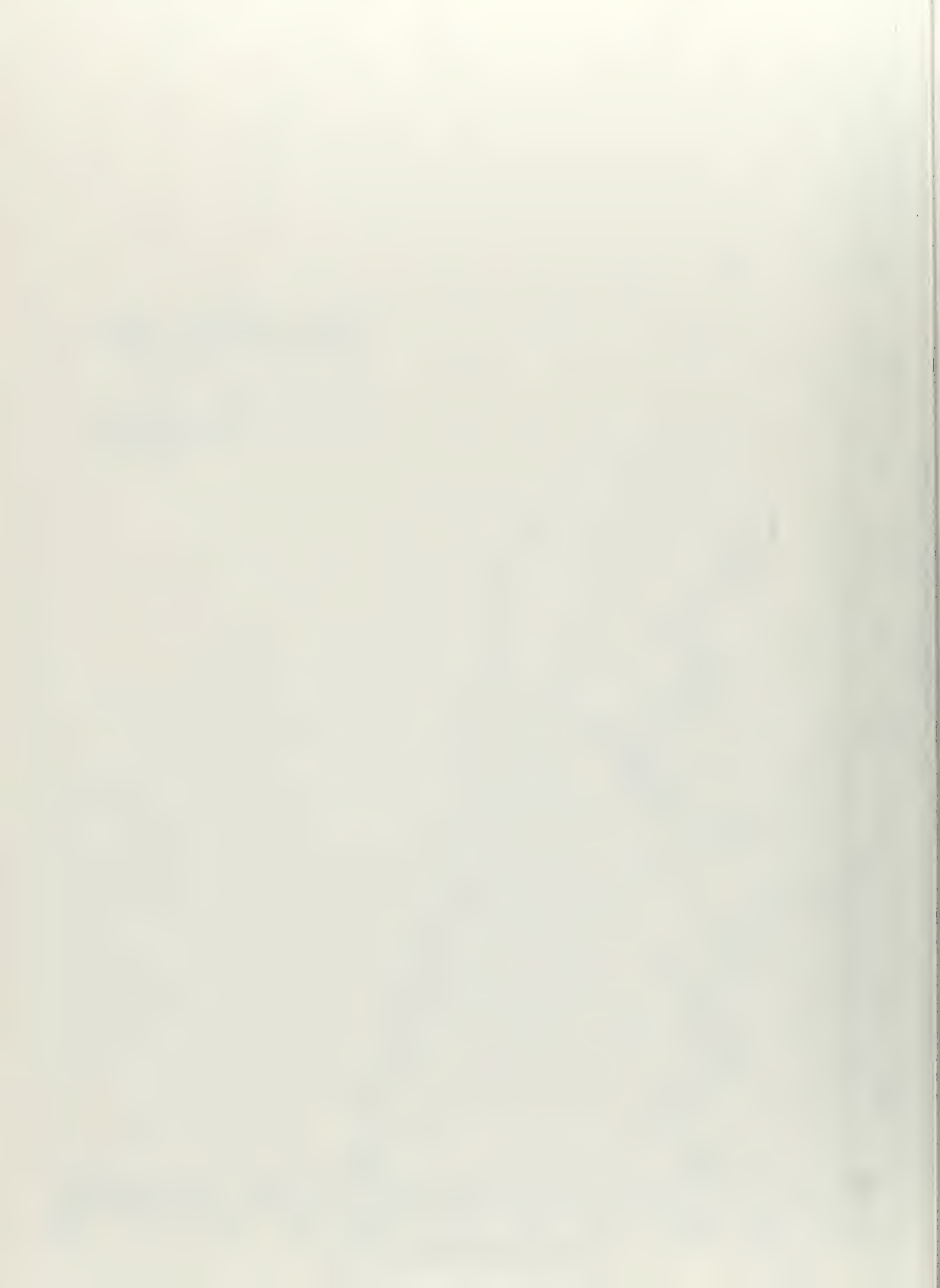






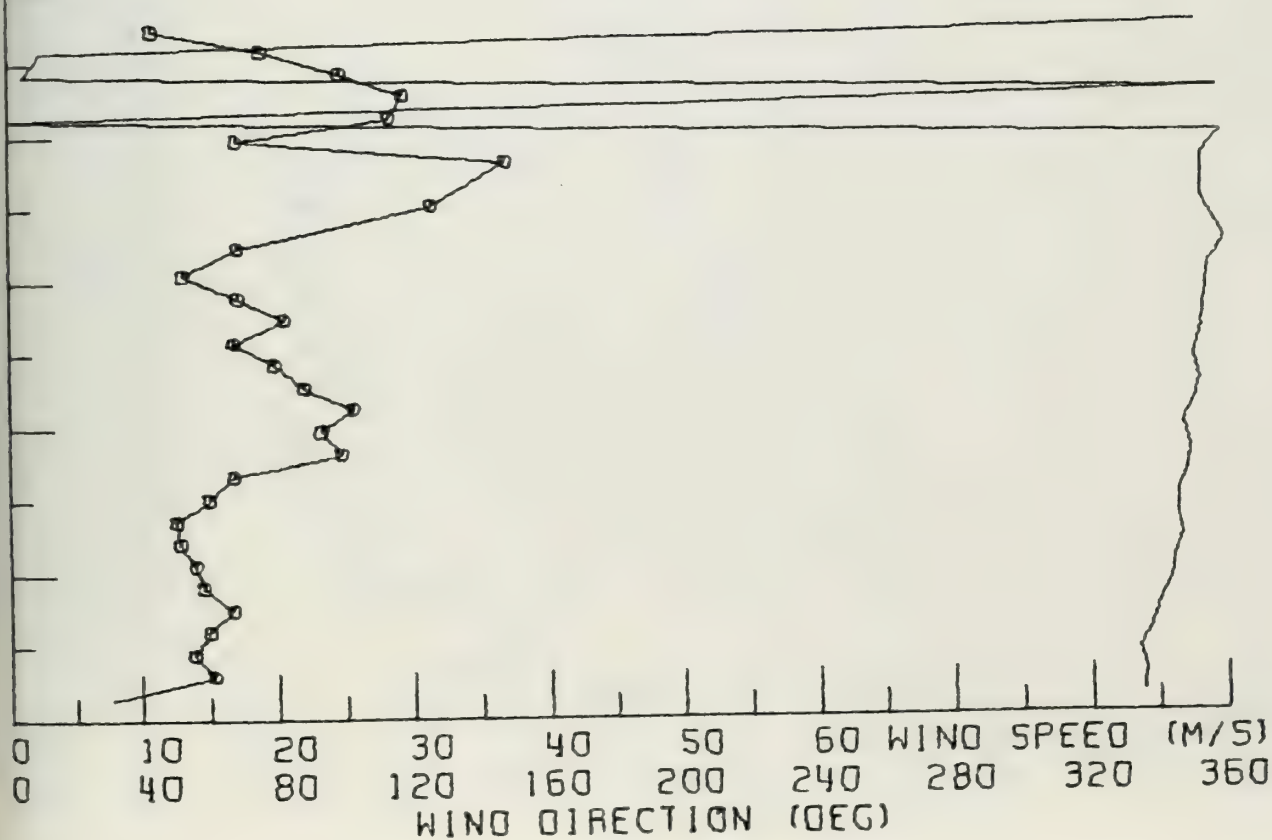


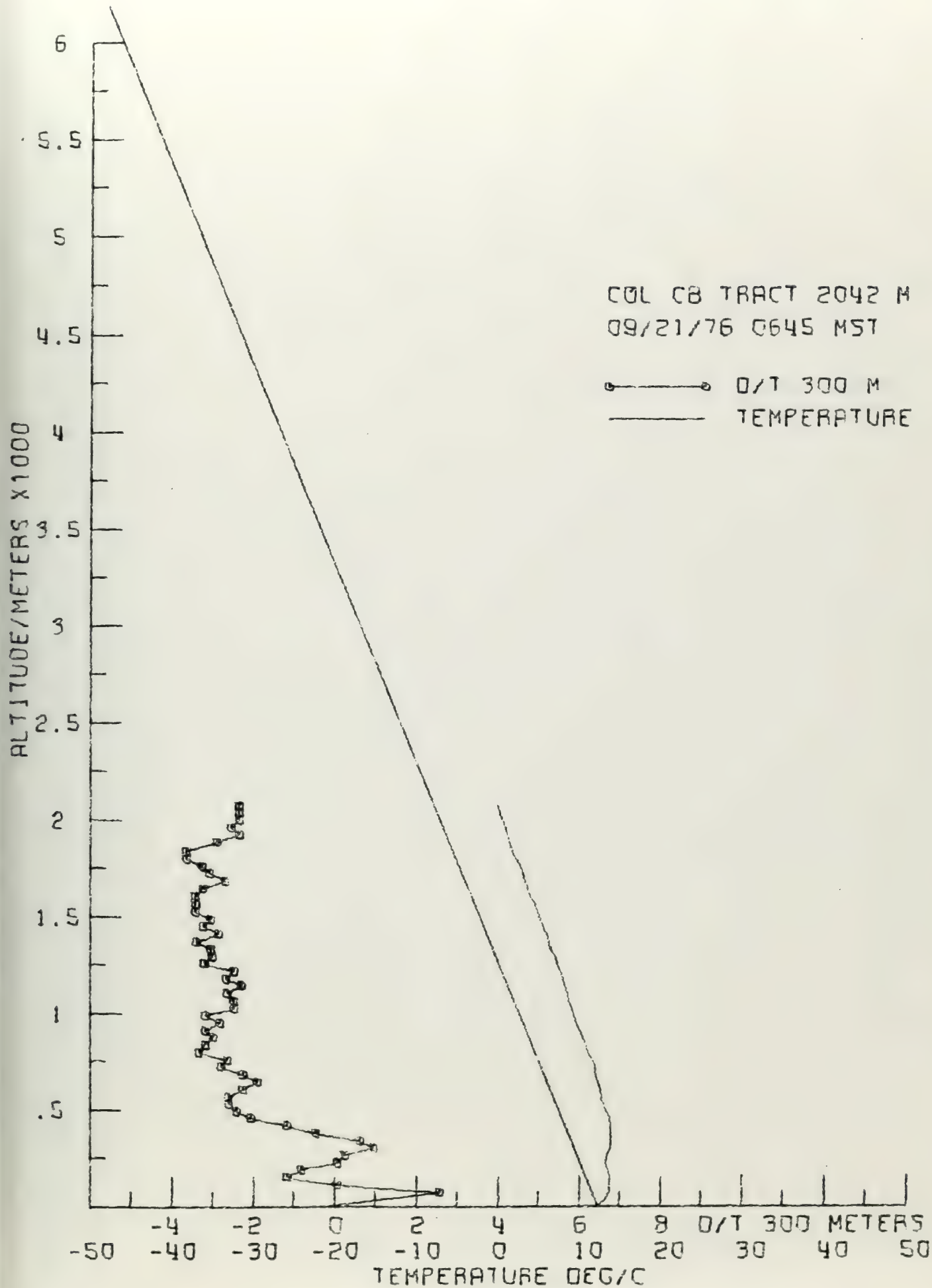


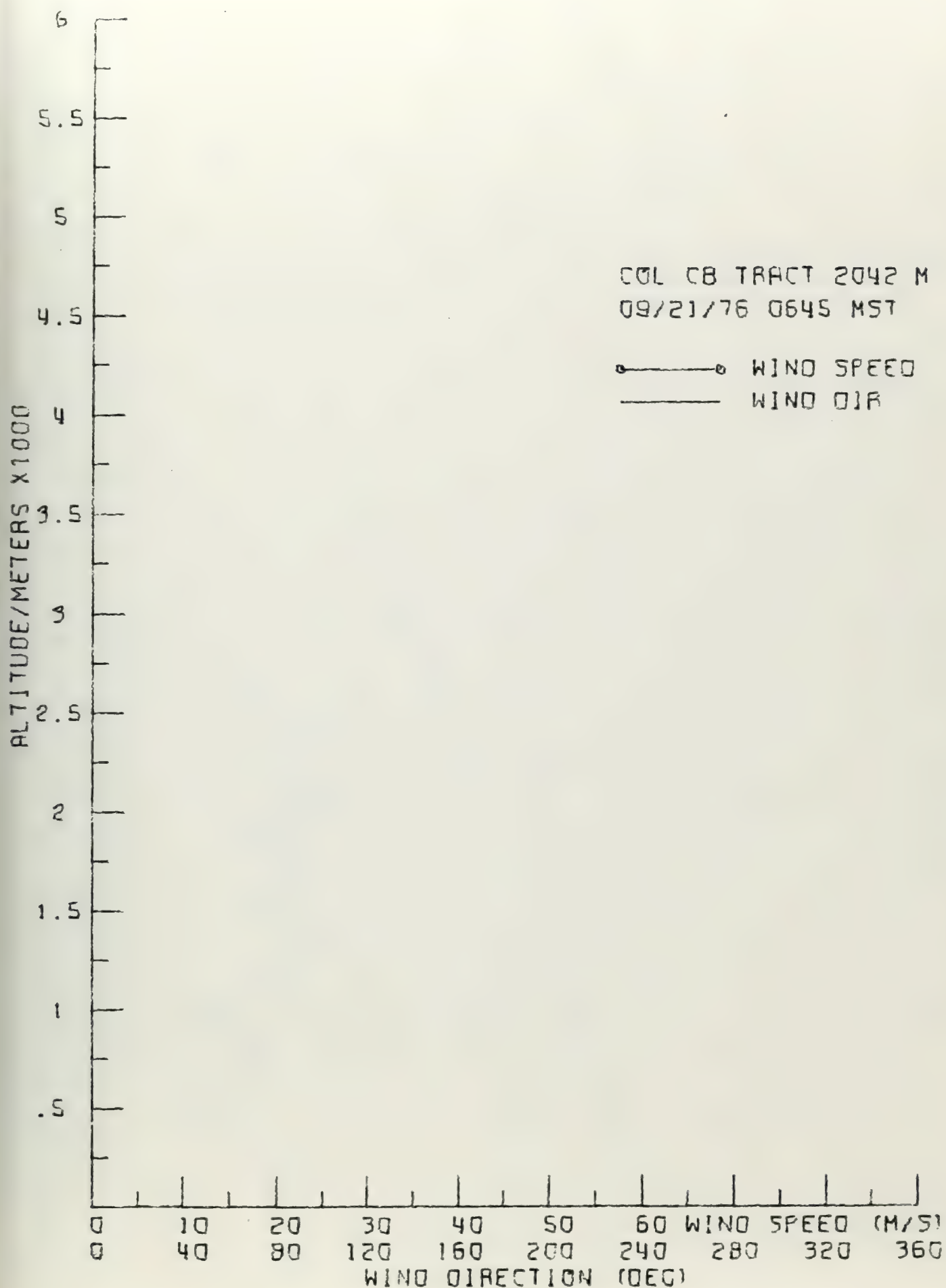


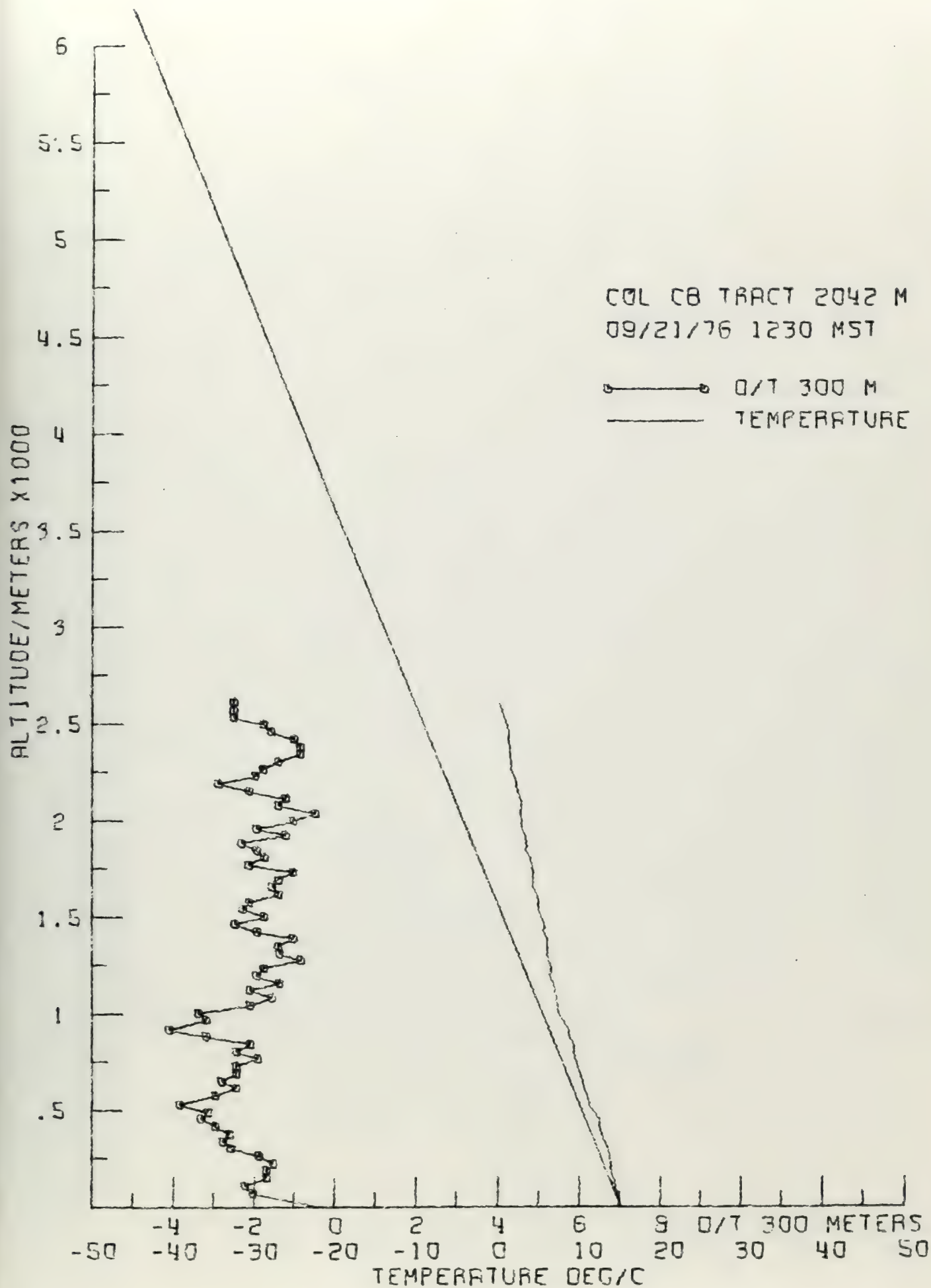


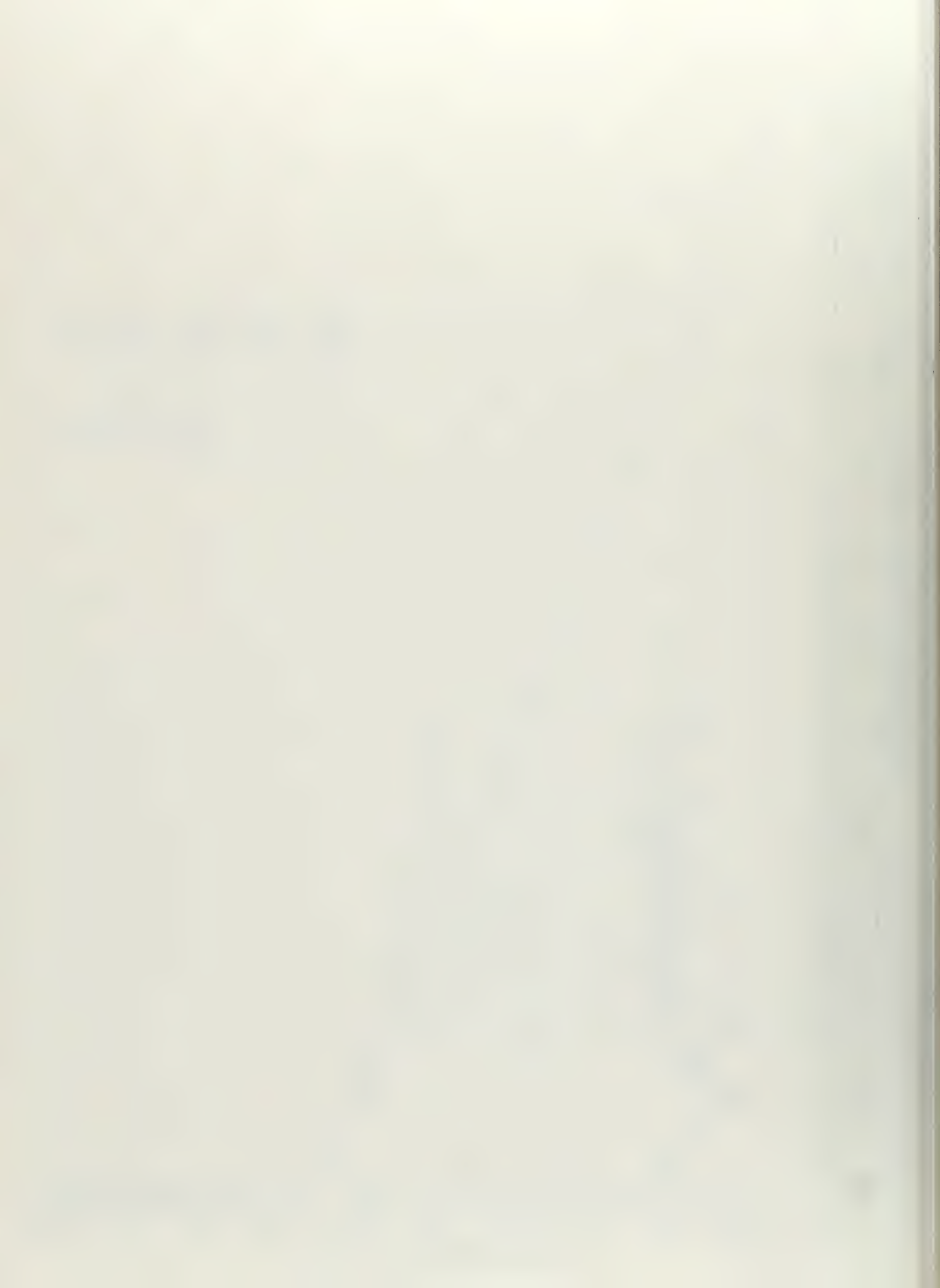
 WIND SPEED
 WIND DIR

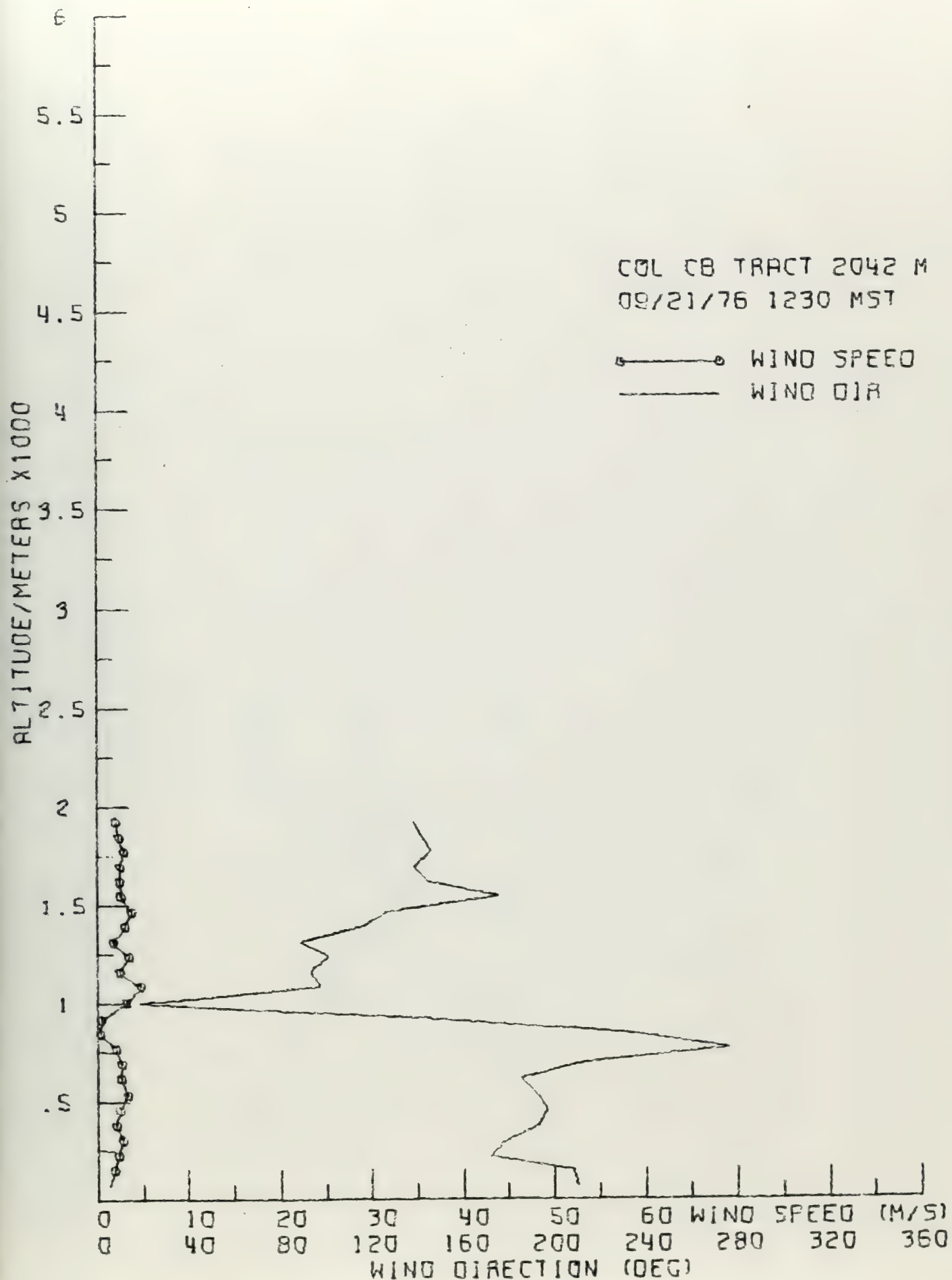


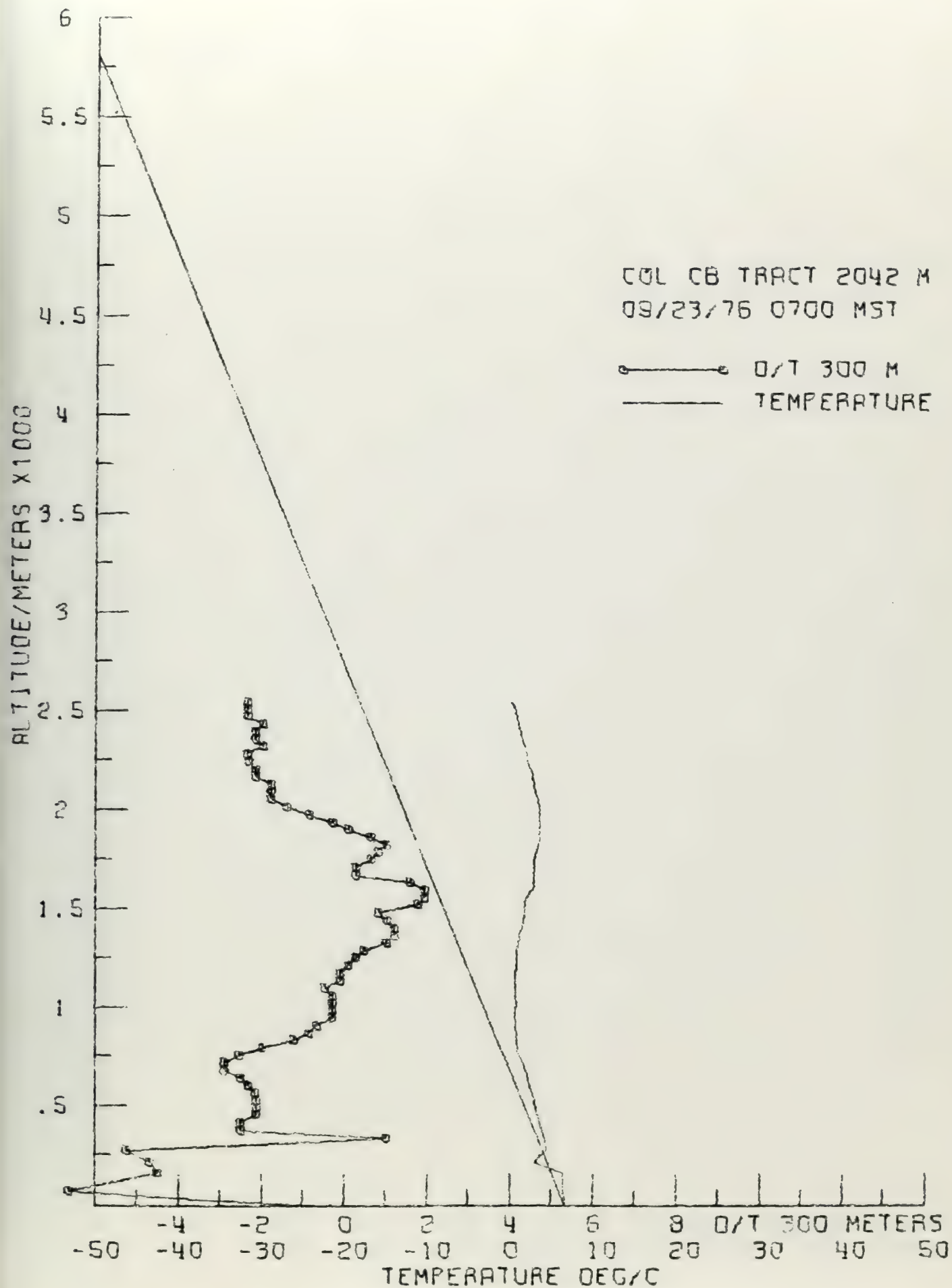




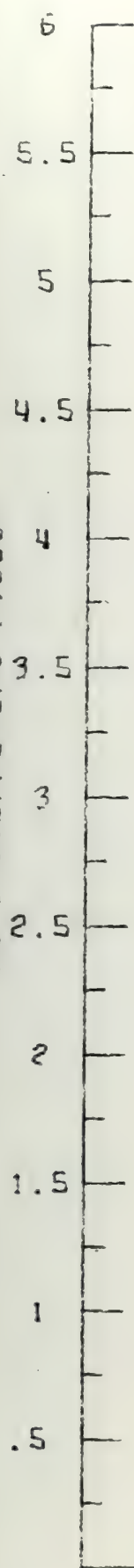






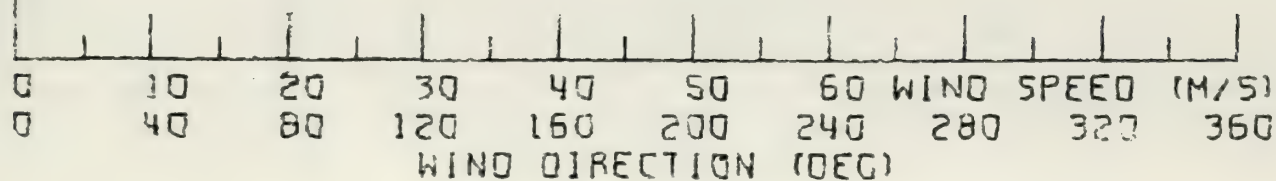


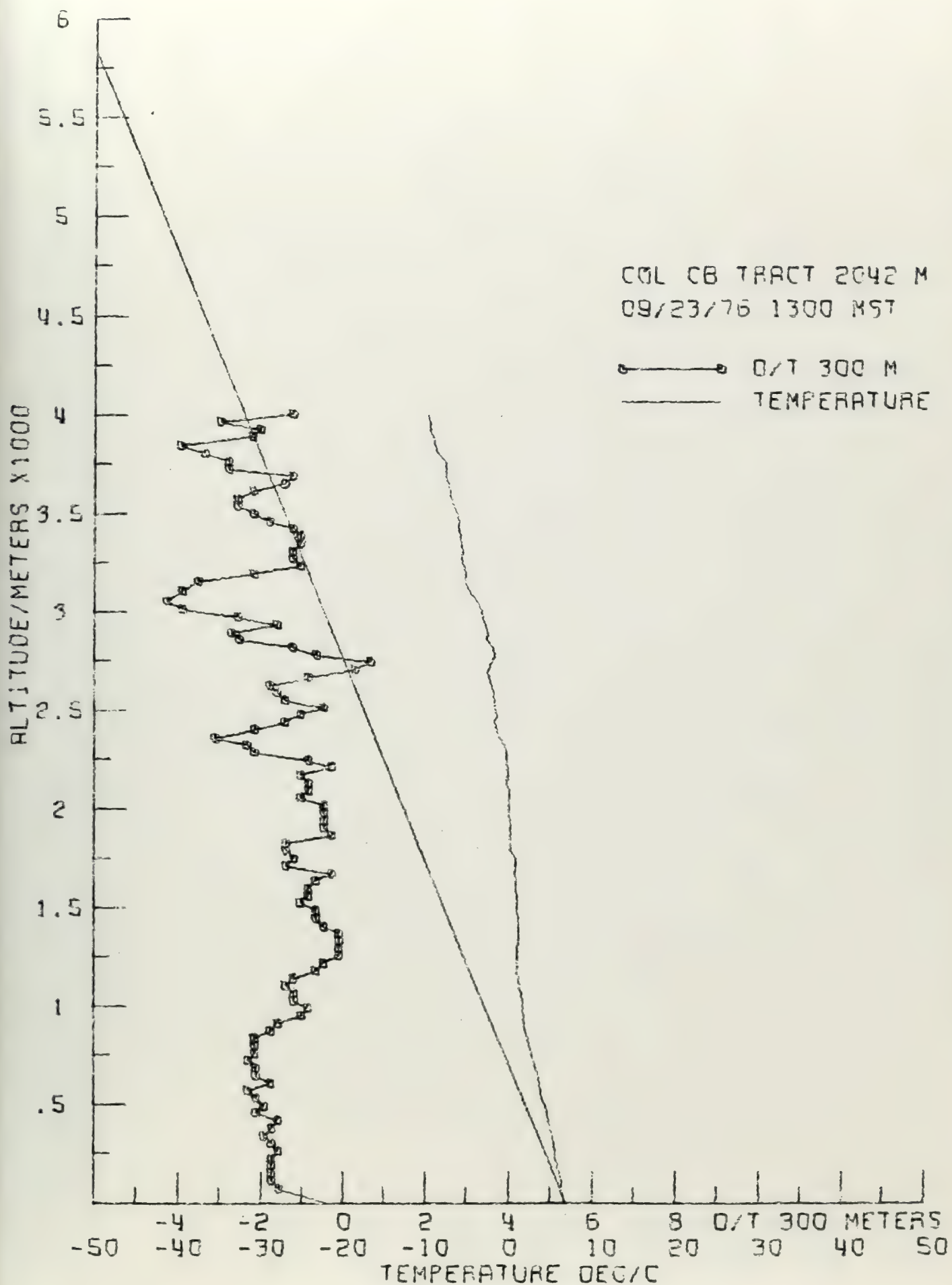
ALTITUDE/METERS X1000



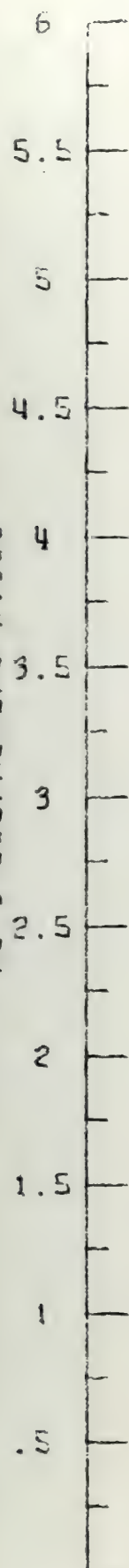
COL CB TRACT 2042 M
09/23/76 0700 MST

—●— WIND SPEED
— WIND DIR



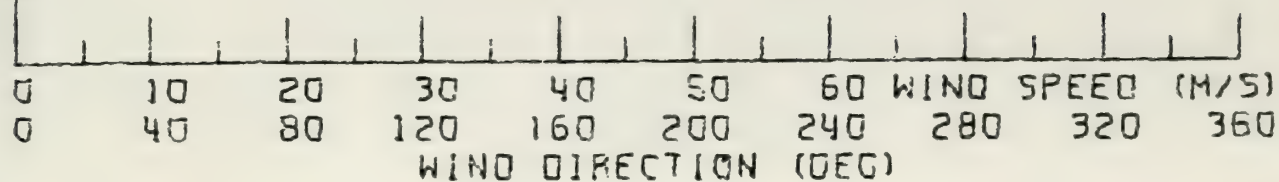


ALTITUDE/METERS X1000

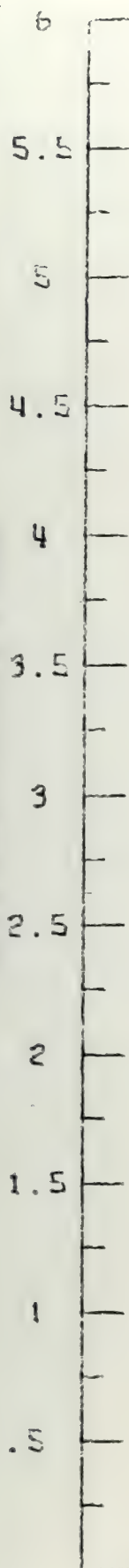


COL CB TRACT 2042 M
09/23/76 1300 MST

—•—•— WIND SPEED
—— WIND DIR

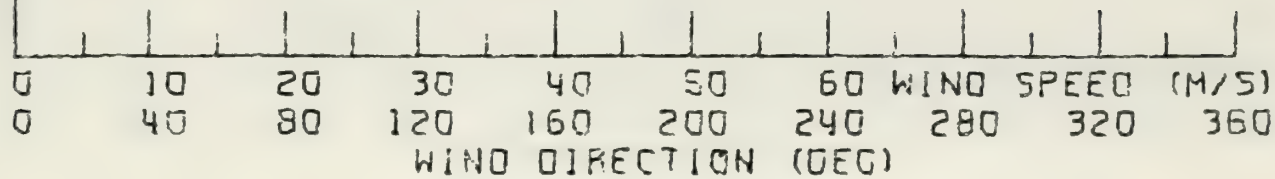


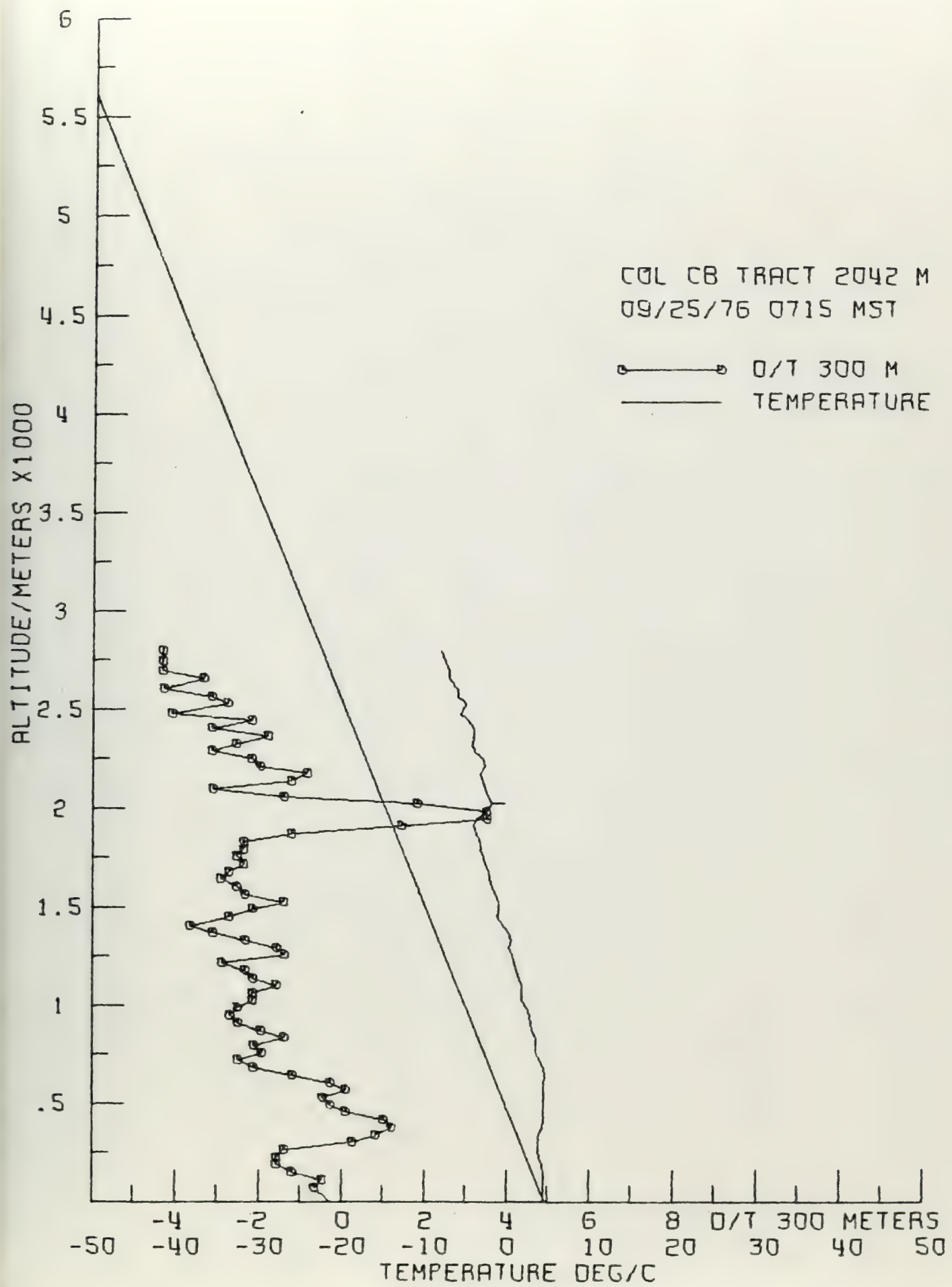
ALTITUDE/METERS X1000

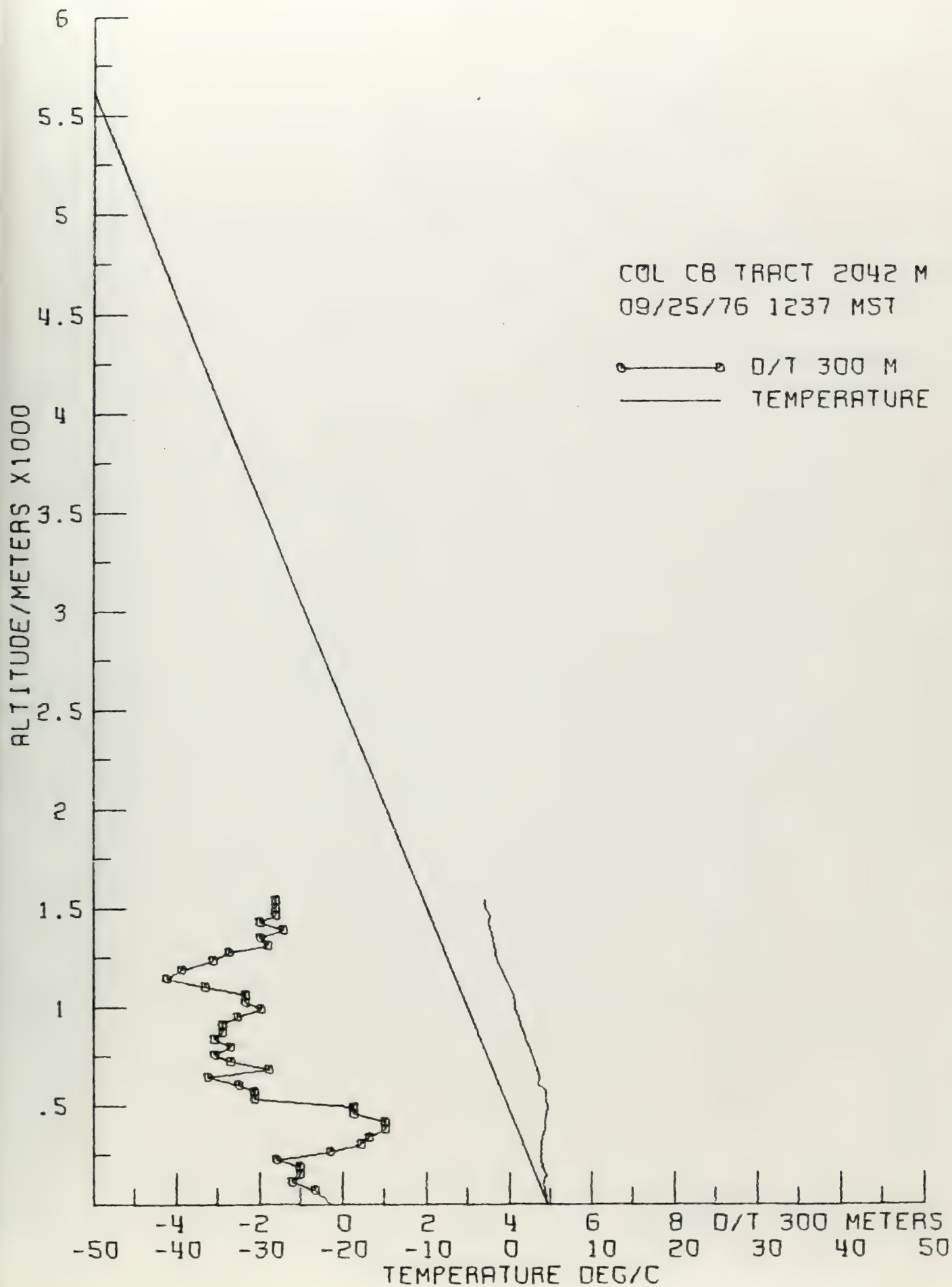


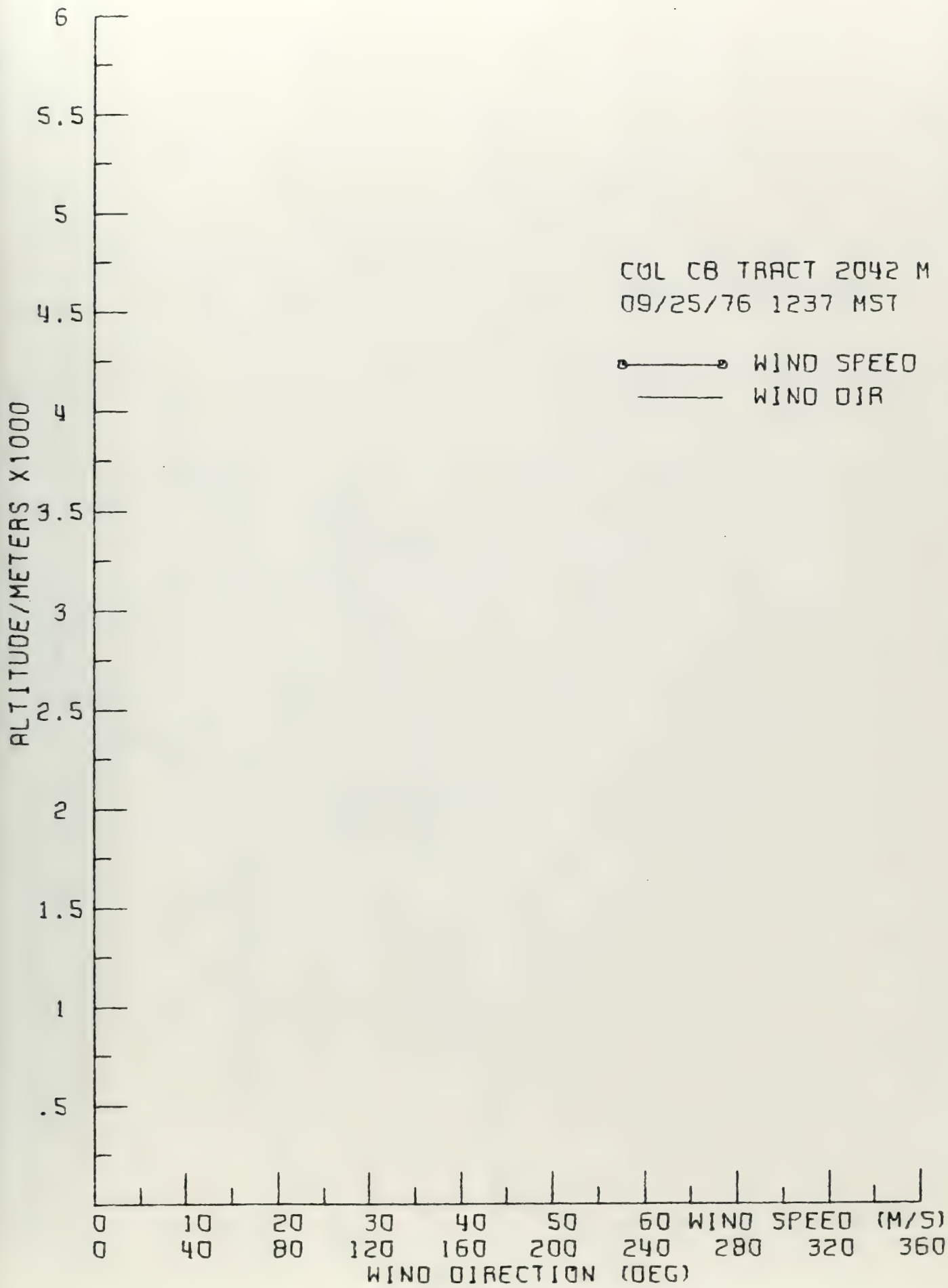
COL CB TRACT 2042 M
09/23/76 1300 MST

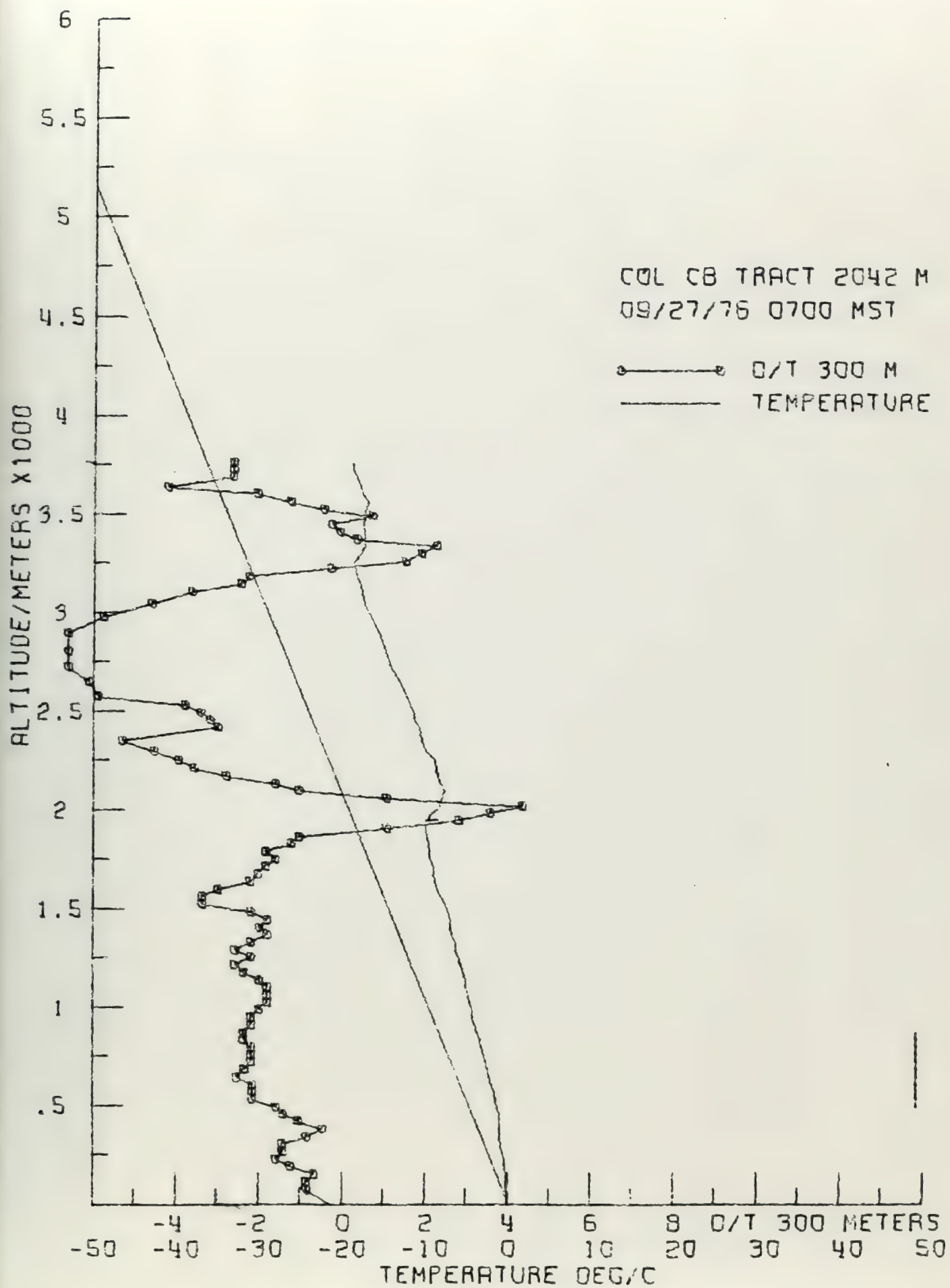
—•—•— WIND SPEED
— WIND DIR











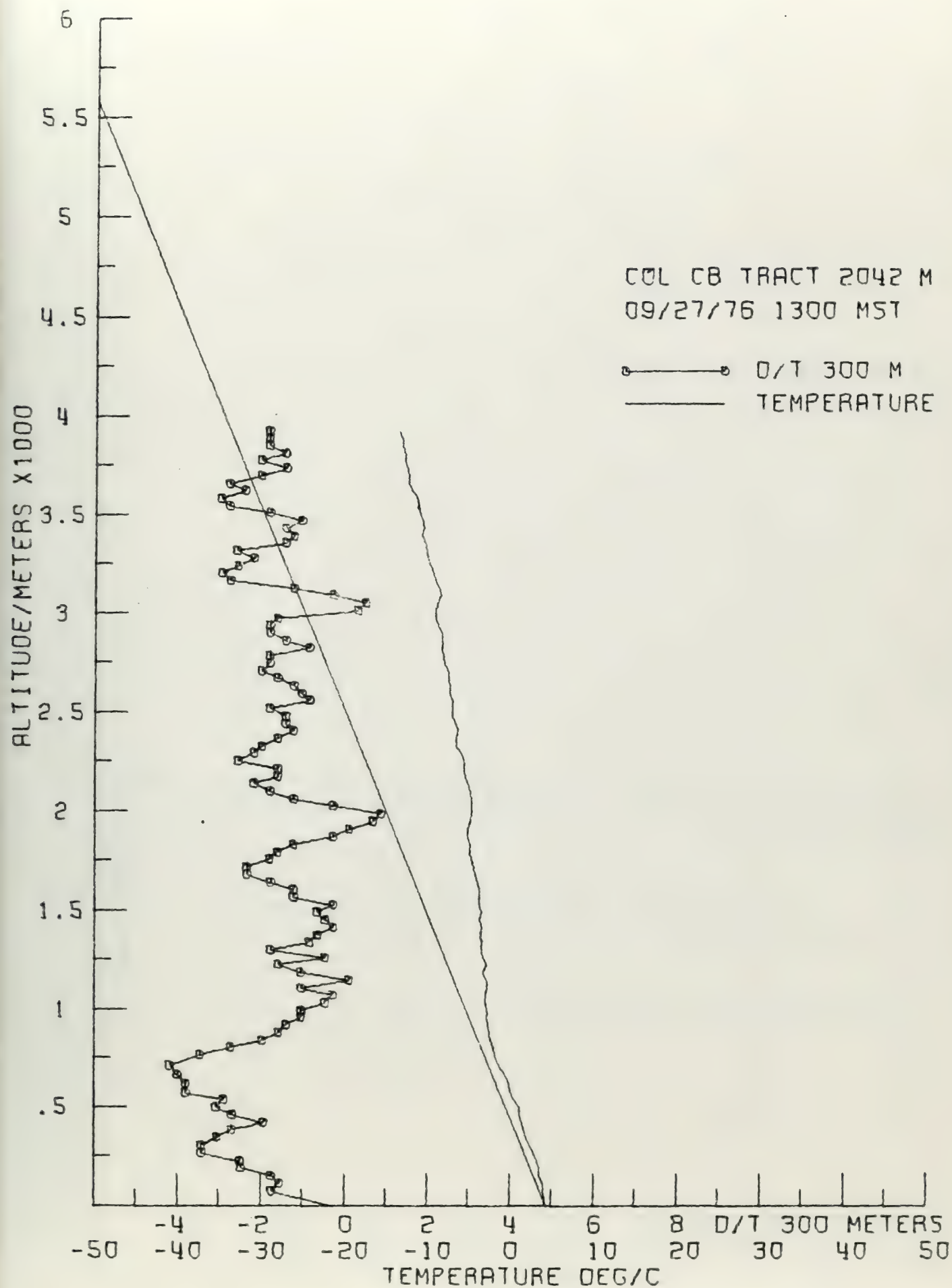
ALTITUDE/METERS X1000

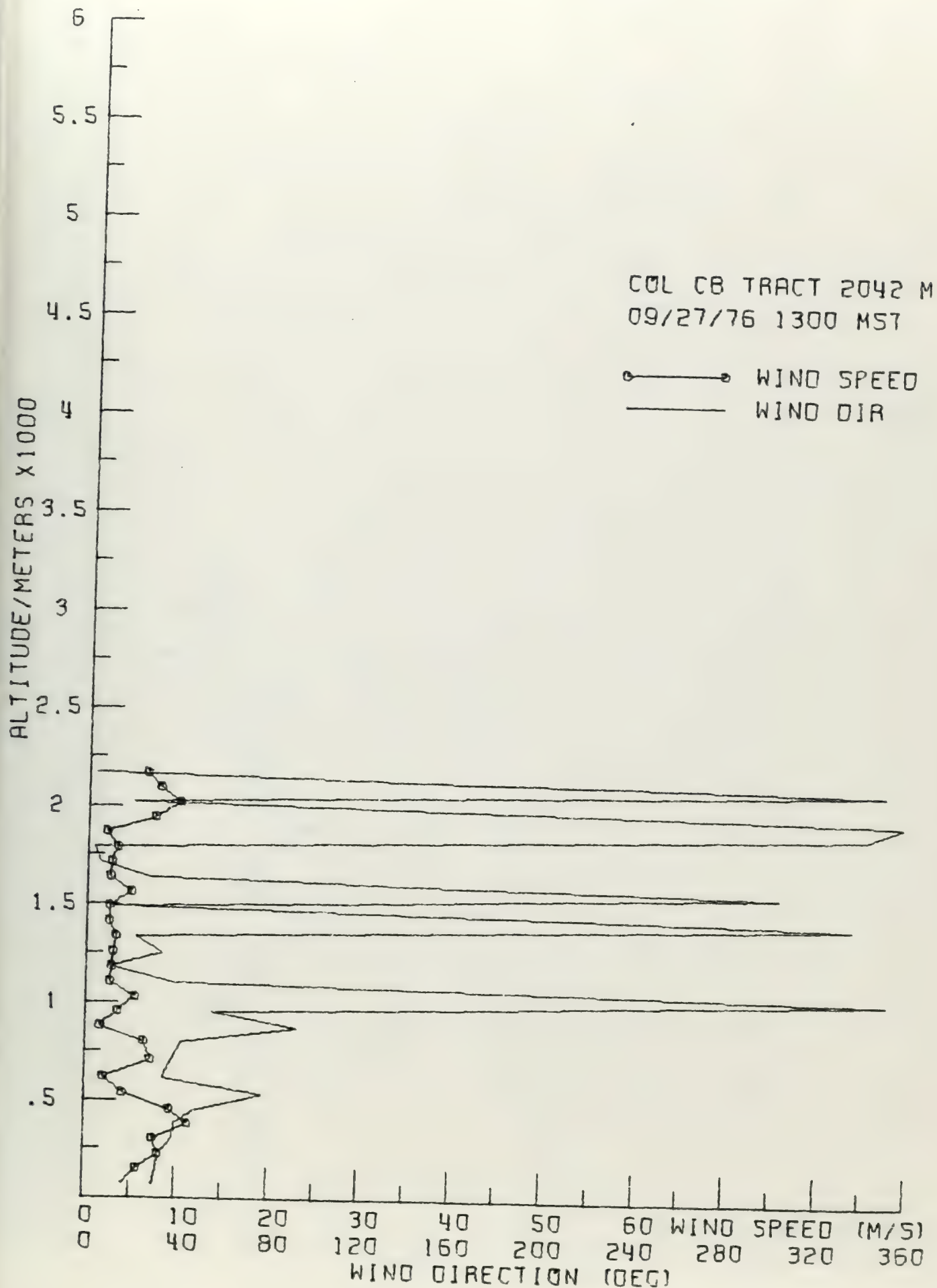
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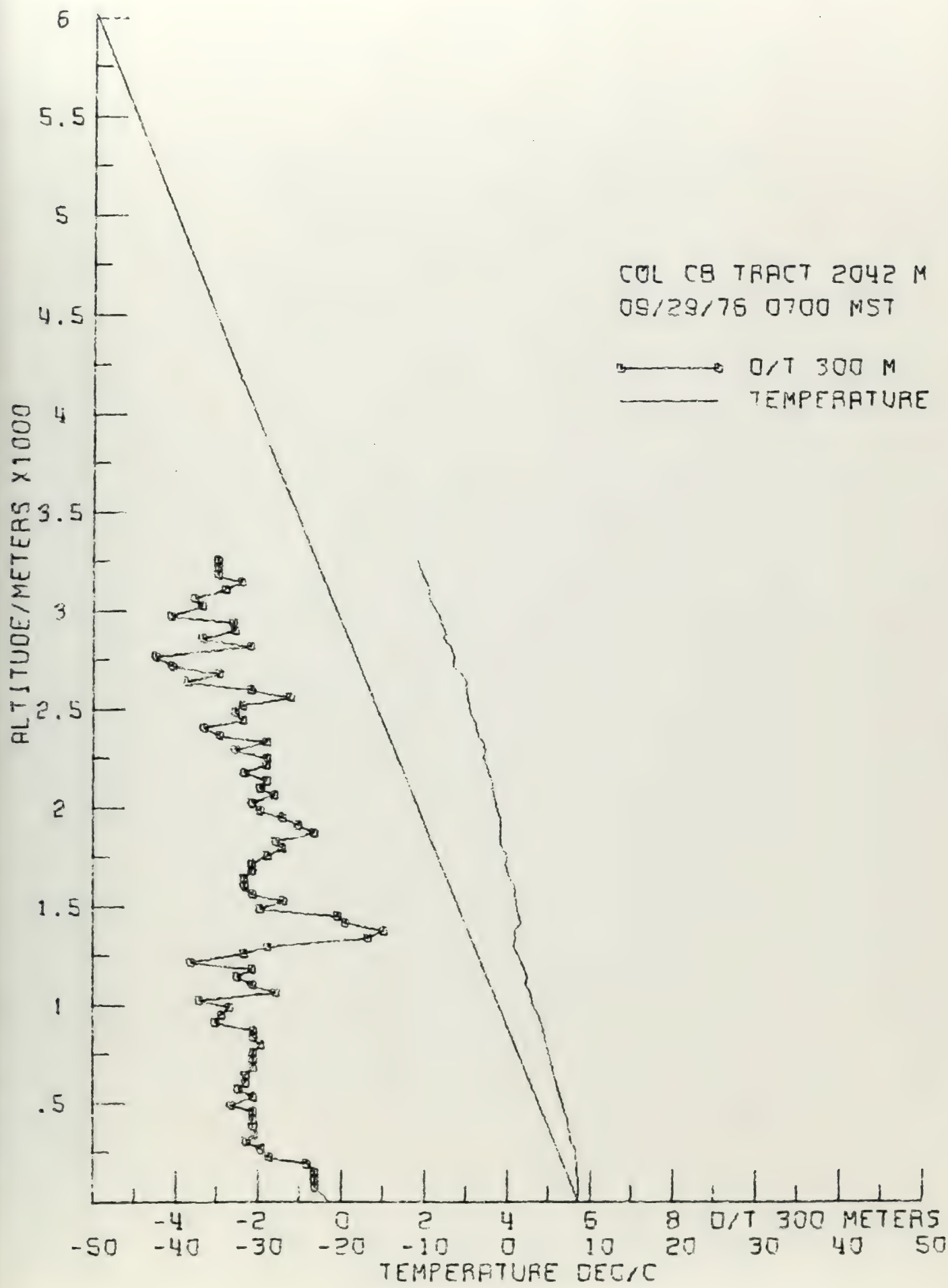
COL CB TRACT 2042 M
09/27/76 0700 MST

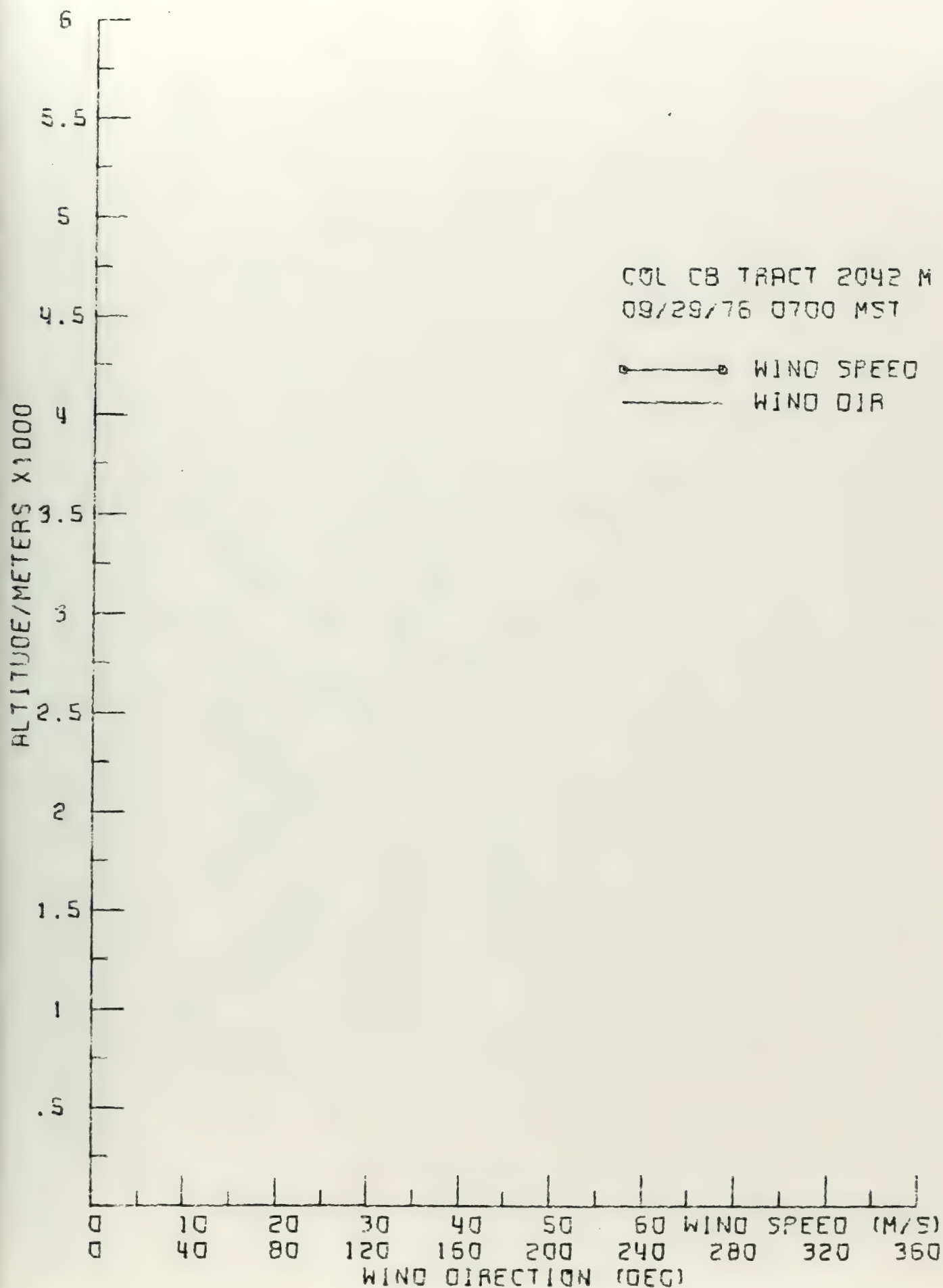
—•—•— WIND SPEED
— WIND DIR

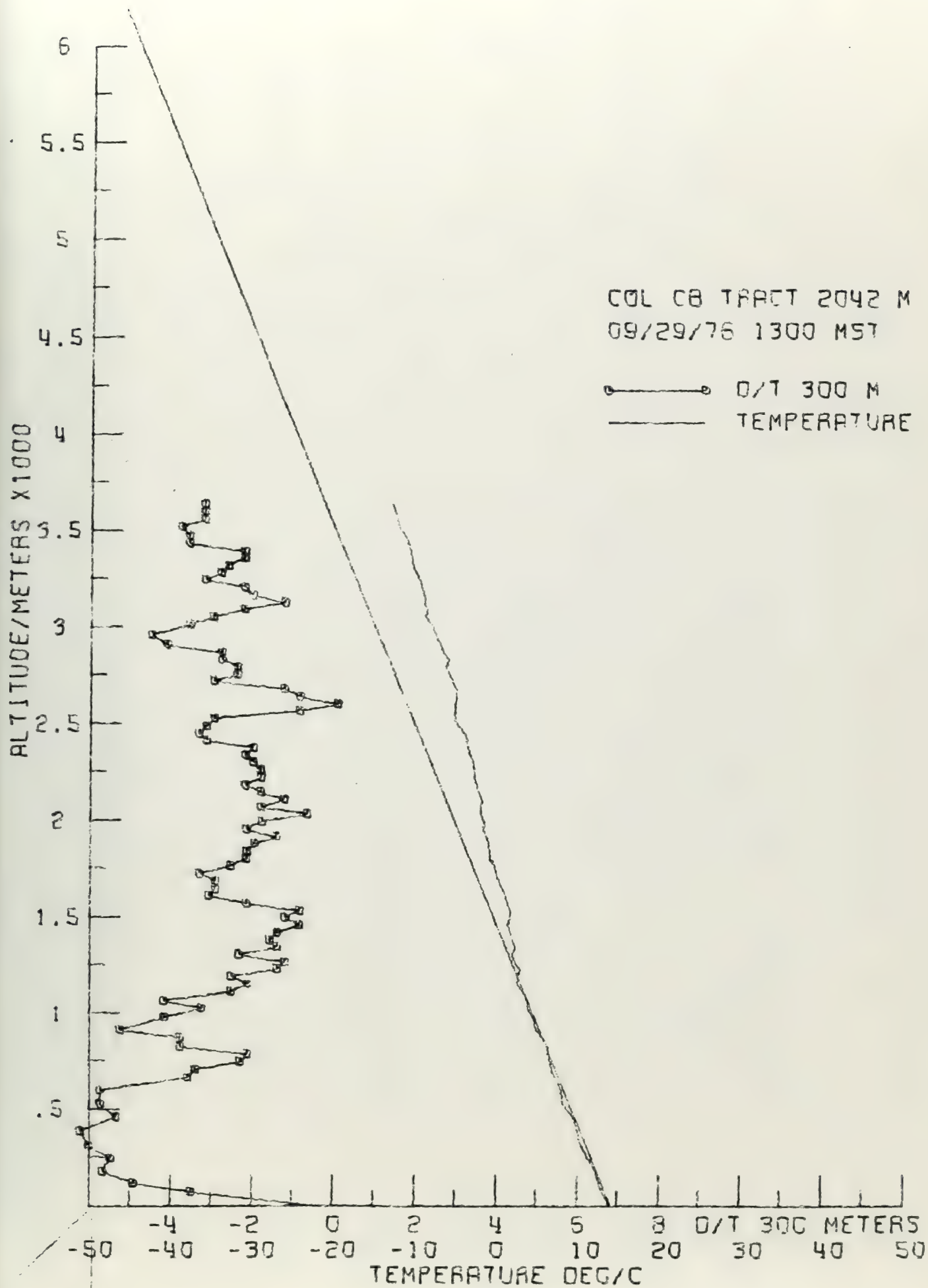
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)







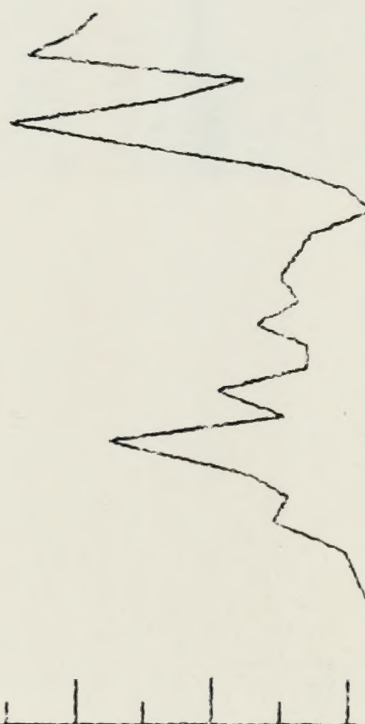
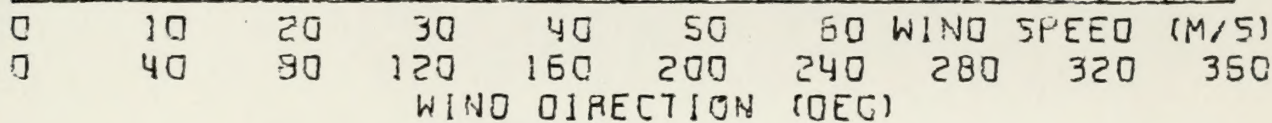
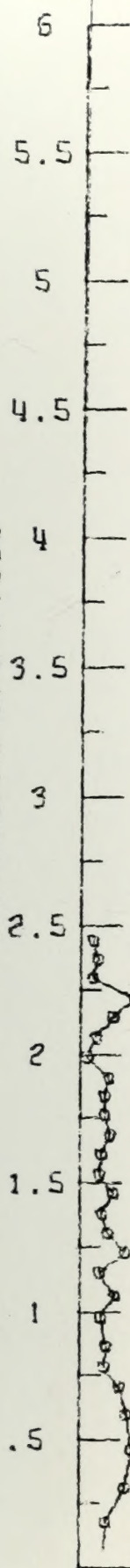




ALTITUDE/METERS X1000

COL CB TRACT 2042 M
09/29/76 1300 MST

WIND SPEED
WIND DIR



Form 1279-3
(June 1984)

BORROWER

TN 859 .C64 C375

Monthly progress
... for the per

DATE LOANED	BORROWER

USDI - BLM

